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### RURAL WATER SUPPLY

### STRATEGY PAPERS

NOVEMBER 1994

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#### **FOREWORD**

A wind of change is sweeping through the rural water supply sector in Namibia. The Government must no longer promote dependency. The time has come for rural Namibians to reclaim control over their own destinies.

It is the policy of our Government that Communities in the rural areas should be encouraged to participate fully in the planning, management and operation of their water supply. This is the only way in which the standard of service can be raised to an acceptable level on a sustainable basis.

Communities which accept the challenge of responsibility for their water supply are taking an important step forwards. I believe that this policy of supporting community participation will lead to increased self sufficiency and that it is a new drive for empowerment of rural people.

The Strategy Papers contained in this document are a sound basis from which we can start to implement the policy of community participation. They will be reviewed after a period of two years.

Support for the Strategy Papers is widespread amongst all organisations who are active in the rural water supply sector. They have been finalised after exhaustive consultation and so represent an agreed common approach. The Strategy Papers are therefore essential information for everybody who is involved with the development of rural water supply in Namibia.

PEPUBLIC OF NAMIBIA
MINISTRY OF AGRICULTURE.

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PERMANENT SECRETARY
AGRICULTURE, WATER
AND RUPAL DEVELOPMENT

Isaac Kaulinge

Permanent Secretary

Ministry of Agriculture, Water and Rural Development

Windhoek, September 1994

#### **RURAL WATER SUPPLY STRATEGY PAPERS**

The Water and Sanitation Policy for Namibia (WASP) was approved by cabinet on the 21st September 1993. The Policy allocates certain responsibilities to the Directorate of Rural Water Supply (DRWS) in the Department of Water Affairs (See page ii). The Rural Engineering Services Division of the Directorate has given careful consideration to the strategies that will be required to achieve the policy objectives allocated to the DRWS. Where these considerations have reached a conclusion, they have been summarised in a Strategy Paper. The complete list of Strategy Papers is as follows:

Strategy Paper S1: Ownership of Rural Water Supply Schemes and Individual Water Points.

Strategy Paper S2: Introduction of Payment for the Service of Water Supply.

Strategy Paper S3: Sector Coordination.

Strategy Paper S4: Legal Status of Water Committees.

Strategy Paper S5: Monitoring and Evaluation System.

Strategy Paper S6: Relationship between the Water Point Committee, the Local Water Committee,

the Central Water Committee and the Department of Water Affairs.

Strategy Paper S7: Implementation of Rural Water Supply Schemes.

Strategy Paper S8: Operation and Maintenance of the Rural Water Supply Equipment.

Draft Strategy Papers have been distributed to a wide audience, mainly to spread information about the DRWS but also to provide an opportunity for feedback from interested parties. The interested parties include Government and Non-Government Organisations who are active in the Rural Water Supply Sector. As a result of the initial exercise in consultation constructive comments were received. Rural Engineering Services Division have incorporated the comments into the Strategy Papers.

The consultation process does not finish here. The Rural Engineering Services Division continues to welcome contributions and comments which should be directed to the address shown below:

Rural Engineering Services Division Directorate of Rural Water Supply Department of Water Affairs Private Bag 13193 Windhoek

(Tel. Windhoek 263141 or 296 9111)

The Strategy Papers will be updated from time to time as experience is gained and more feedback is received. For this reason, only a limited number of "controlled" copies have been made. Updates will be sent to the holders of the controlled copies. There is no objection to organisations making their own copies, but they should be aware that amendments may be made.

# OBJECTIVES AND FUNCTIONS OF THE DIRECTORATE OF RURAL WATER SUPPLY

The <u>overall objective</u> of the Directorate of Rural Water Supply (DRWS) is to facilitate the reasonable needs and expectations of the rural population to explore and create sufficient rural water supply schemes.

#### Sub-objectives of the Directorate are:

- (a) Contribute towards improved public health.
- (b) Reduce the burden of collecting water.
- (c) Promote community based social development taking especially into account the role of women.
- (d) Support basic needs.
- (e) Stimulate economic development.

The <u>operative strategy</u> is to create an organisation which can help all rural communities to develop a reliable and accessible source of safe water with sufficient capacity on a sustainable basis at an affordable cost.

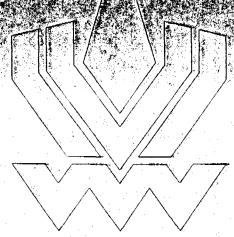
#### The functions of the DRWS can be summarised as follows:

- (a) Determination and management of overall policies, objectives and strategies for the Rural Water Supply sector.
- (b) Communication, fiaison, planning, training, educating and supporting rural communities with their involvement and participation.
- (c) Evaluation and planning of new water supply schemes and improvements to existing schemes in conjunction with the local community.
- (d) Technical and financial assistance to communities for the implementation of new water supply schemes and improvements to existing schemes.
- (e) Technical and financial assistance to communities for the operation, maintenance, and management of their water supply.
- (f) Organisational support to rural communities to enable the establishment of Water Point Committees, Local Water Committees and Central Water Committees.
- (g) Coordination of Government and Non-Government Organisations which are active in the Rural Water Supply Sector.
- (h) Monitoring of all aspects of the Rural Water Supply sector to ensure that accurate and up to date information is available.

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### STRATEGY PAPER NO. S1

OWNERSHIP OF RURAL WATER SUPPLY SCHEMES

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INDIVIDUAL WATER POINTS

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#### STRATEGY PAPER

# PAPER NO. S1: OWNERSHIP OF RURAL WATER SUPPLY SCHEMES AND INDIVIDUAL WATER POINTS

#### 1. PREAMBLE

Community participation can only succeed if the community has a strong sense of ownership of the facilities they are looking after.

In the Audience Survey (April 1993) community members have clearly stated that some kind of ownership is a pre-condition for their full involvement.

The communities also indicated a number of criteria and activities which would enhance their sense of ownership, the most important being assisting in the planning, design and construction phase and a formal handing over of the facilities.

It is the purpose of this paper to present the most appropriate form of ownership for the community which guarantees the sustainability of the rural water supply scheme. The question of ownership of seasonal cattle watering points where there is no fixed community is not addressed by this paper.

The paper also presents the procedures for handing over the facilities to the Local Water Committees.

#### 2. FORM OF OWNERSHIP

There are basically 3 possible options for ownership of the rural water supply facilities. The first option is no ownership at all for the community, leaving full ownership by the Government, the second option is full ownership for the community and the third option is combined ownership between the Government and the community (user ownership).

The first option is not acceptable as the community will not assume any responsibility for the operation and maintenance of the scheme. It also runs counter to accepted Government policy.

The second option is not feasible as Government must keep some form of responsibility and is legally restricted from giving its property away.

The third option, user ownership, is the only feasible and sustainable one and will be discussed in the following paragraph.

#### 3. USER OWNERSHIP

User ownership means that ownership of the facilities of the rural water supply scheme is leased to the Local Water Committee, under specific conditions, and that an Agreement is signed between the Directorate of Rural Water Supply and the Committee, specifying each party's technical and financial responsibilities with regard to operation and maintenance of the scheme.

The legal status of the Committee, which is a closely related issue in this matter, is being dealt with in Strategy Paper No. S4.

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User ownership supposes that the facilities of the scheme are handed over to the Committee for free while the Committee takes responsibility for the operation and maintenance of the scheme to a level specified in the Agreement.

#### Conditions on user ownership will be as follows:

- The facilities may only be used for their intended purpose (i.e. sustainable potable water supply for the immediate use of the community it serves).
- No part of the facilities may be removed or sold without adequate replacement and the consent of the other party.
- Extensions and improvements to the facilities or providing private connections may only be carried out after consultations with the DRWS on technical matters.

After completion of each scheme, which includes the establishment and training of the Water Point Committees and the availability of Rural Water Extension Officers, the facilities will be inspected and handed over to the Committee and the Agreement signed. User ownership has then become effective.

### 4. IMPLEMENTATION OF USER OWNERSHIP OF RURAL WATER SUPPLY FACILITIES BY THE COMMUNITY

Implementation of user ownership is directly related to Strategy Paper No.S2; "Introduction of Payment for the Service of Water Supply".

Depending on the specific situation of a Local Water Committee, implementation can take place on the level which is most suitable for that Committee.

The full stages of implementation are:

#### Stage 1:

In this stage the initial handing over of the facilities to the Local Water Committee (LWC) will take place at which time an agreement will be signed between the Local Water Committee and the Directorate of Rural Water Supply (DRWS), stating the exact responsibilities of both parties. Costs of maintenance to be born by DRWS.

For this stage the following issues have to be resolved:

- Hand over/Take over procedures
- Form of agreement/responsibilities/lines of communication
- Legal status of LWC/ constitution
- Form of ownership

The agreement will, among other things, stipulate that the Local Water Committee will appoint one or more Scheme Caretakers, who will report maintenance and repair requirements to the Regional Office of the DRWS, through the Local Water Committee. Caretakers will receive on the job training from the DRWS. The present Caretakers of those Water Point Committees (WPC) already in place, must be involved.

Stage 2: During this stage the Directorate of Rural Water Supply will put in place its rural extension organisation, including the maintenance units. The Rural Water Extension Officers (RWEO) will start establishing and training the Local Water Committees and the Water Point Committees. Once the Water Point Committees are in place, they will start collecting financial contributions from the users, on behalf

of the Local Water Committee, to pay for routine maintenance activities and minor repairs. For this stage the following issues have been resolved and are currently being implemented:

- Training of Rural Water Extension Officers
- Training of Local Water Committees and Water Point Committees
- Permanent legal status of the Water Committees
- Revised form of agreement between the Department of Water Affairs and the Local Water Committee
- An agreement between the Local Water Committee and the Water Point Committee to define the various responsibilities
- All handbooks to be available
- Payment strategy to be in place

#### This stage has three distinct activities:

- a: Preparation of RWEO training programme, which was completed in February 1994
- b: Training programme of RWEO's, which started in April 1994 and is to be completed by the end of 1996, and
- c: Continued setting up and training of the LWCs and WPCs, which started during 1994 and will be at full speed by the end of 1996.

<u>Stage 3:</u> In this stage full responsibility for operation, maintenance and management of the facilities will be handed over to the Local Water Committee.

Payment will gradually be increased until full cost-recovery of all operation and maintenance is achieved in accordance with the strategy for introduction of payment.

The Directorate of Rural Water Supply will only be responsible for major repairs and overhauls and technical assistance.

#### For this stage the following issues have to be resolved:

- Revised agreement between DRWS and LWC
- Revised agreement between the Local Water Committee and the Water Point Committee

Stage 3 can only be initiated when Stage 2 has been implemented successfully.

- ANNEX 1: DRAFT CONSTITUTION LOCAL WATER COMMITTEE
- ANEEX 2: DRAFT HAND OVER/ TAKE OVER FORM
- ANNEX 3: DRAFT AGREEMENT BETWEEN LOCAL WATER COMMITTEE AND THE DIRECTORATE OF RURAL WATER SUPPLY

NOTE: THE TEXT OF THE ANNEXES MAY VARY WITH THE DIFFERENT STAGES OF IMPLEMENTATION

#### ANNEX 1:

#### (DRAFT)CONSTITUTION

Name of the water point	<b>!</b>	:			·	 · · ·		
Name of water supply s	cheme	:	-		ijr.w.a	 · · · · · · · · · · · · · · · · · · ·		
Date of Establishment		:				 · <del></del>	. <del></del> ,	
Postal Address			:	· · · · · · · · · · · · · · · · · · ·	·		· ·	. :

#### Membership:

- Membership of the Committee is open to all adult members of the community using the Water Point.
- 2. Members are elected in free and fair elections.
- Candidates should make themselves known to the Committee members and the community before the date earmarked for the elections.
- 4. Members are elected for an initial period of 2 years. New elections have to be held every 2 years,
- 5. All members can be re-elected.
- 6. Members who want to resign before the end of a full term must give sufficient notice to allow for the election of a suitable replacement.
- 7. A member can be expelled from the Committee when this is proposed by two thirds of the members of the Committee. A request for expulsion can also be brought forward by any member of the community.

#### Committee:

- The Committee will consist of a Chairperson, a Secretary, a Treasurer (the executive members)
  and one or more general members.
- The Committee will appoint a Caretaker to operate and maintain the water point. The Caretaker will be a special member of the Committee.
- When a new Committee is elected, at least one executive member of the old Committee must remain for reasons of continuity.
- The Committee should fairly represent all user groups in the community.
- The Chairperson of the Committee shall represent the Committee in external affairs, e.g. the Local Water Committee meetings.

#### ANNEX 1 (CONTINUED):

#### Meetings:

- 1. The Committee shall be elected in a General Community Meeting, to be called by the Local Water Committee with assistance of the Rural Water Extension Officer.
- 2. Within a week after the election, the Committee will hold its first Committee meeting.
- 3. The Committee will hold regular Committee meetings, at least once every month.
- During the Committee meetings the Committee shall deal with all matters concerning the Water point.
- 5. The Secretary will take minutes of all the discussions and decisions and distribute the minutes to the members before the following meeting; the minutes must also be made available to the members of the community.
- The Committee shall call regular General Community Meetings to inform the Community of its activities.

#### Constitution:

The constitution can be changed to suit the individual Water Point Committee when two-thirds
of the Committee members support the proposed change.

ANNEX 2:

#### (DRAFT)HAND OVER/TAKE OVER FORM

PROCEDURE FOR THE HAND OVER/TAKE OVER OF A PIPED RURAL WATER SUPPLY SCHEME FROM THE DIRECTORATE OF RURAL WATER SUPPLY TO THE LOCAL WATER COMMITTEE NAME OF WATER SUPPLY SCHEME: **LOCATION OF WATER SUPPLY SCHEME:** PART 1: JOINT INSPECTION OF WATER SUPPLY SCHEME PERSONS PRESENT AT INSPECTION: DRW\$: ..... DATE: ..... The joint inspection of the water supply scheme has resulted in a list of necessary repairs, as shown in the attached REPAIRS LIST which also states who is responsible for each repair. Date agreed for completion of repairs: Date agreed for the FINAL JOINT INSPECTION: SIGNED: DRWS: ..... LWC: DATE: ..... PART 2: FINAL JOINT INSPECTION OF RURAL WATER SUPPLY SCHEME The final joint inspection of the scheme has been carried out and both parties agree that the scheme is in good order and operational condition. The scheme is hereby officially handed over to the Local Water Committee under conditions set out in the AGREEMENT between DRWS and the LWC. SIGNED: DRWS: ..... LWC:

DATE: .....

#### ANNEX 3:

### (DRAFT)AGREEMENT

between

#### **Directorate of Rural Water Supply**

#### and the

	Local Water Committee	of:		
·.			0.5	
1,	The Directorate of Rural Water Supply sha	all entrust the		Local Water
	Committee with the USER OWNERSHIP	of the	Rural Water (	Supply Scheme
2.	No section or part of the scheme and its far partners to the agreement.	acilities may be remo	ved permanently	by either of the
3.	Responsibilities of the LWC:			
	- to set up and train Water Point (	Committees, with the	assistance of the	ne Rural Water
	Extension Officer.			
	- to make sure that the scheme is	well looked after.		
	- to ensure that all members of the	community have acc	cess to the availa	ıble water.
	- to encourage the WPC's to maint	ain and improve their	r water points.	
	- to direct all communications with	the Government to the	ne RWEO.	
	<ul> <li>to appoint one or more Scheme Caretakers.</li> </ul>	Caretakers to adv	ise and assist th	ne Water Point
	to report all maintenance and report community, to the Rural Wa			capacity of the
	<ul> <li>to set the tariffs for the end use maintaining the scheme.</li> </ul>	ers, covering all cost	s for bulk water,	, operating and
	<ul> <li>to direct the Water Point Committee hand it over.</li> </ul>	es to collect financial	contributions from	m the users and
	- to arrange for annual independen	nt checking of the acc	count books.	
	- to collect monthly monitoring form	ns from the Water Po	oint Committees.	

to report monthly, on standard forms, to the Department of Water Affairs on financial and

technical progress.

#### ANNEX 3 (CONTINUED):

#### 4. Responsibilities of DRWS:

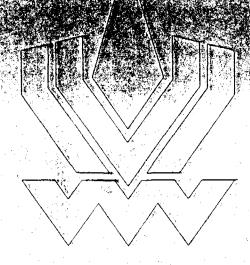
- to provide those back-up services to assure a sustainable water supply to the community.
- to employ a Rural Water Extension Officer to the area who will assist the LWC in carrying out its functions.
- to assist, through the Rural Water Extension Officer, the Local Water Committee with setting up and training Water Point Committees.
- to assist in arranging major maintenance and repair jobs which are beyond the capacity
  of the local community.
- to carry out on-the-job training for the caretakers, appointed by the Local Water Committee and the Water Point Committees.
- to advise on technical and financial matters when requested.

#### 5. Breach of Agreement

In case of breach of this agreement by one of the partners, the other partner can ask for arbitration. An Arbitration Committee will be formed, consisting of a representative of the Central Water Committee, a representative of the DRWS and a local Councillor. The decision of the Arbitration Committee will be binding.

			LOCAL WATER COMMITTEE
THE CHAIRPERSON		<del></del>	
THE SECRETARY	:		
THE TREASURER	:		
	OF THE DIRECTORATE		TER SUPPLY 19
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### STRATEGY PAPER NO. S2

INTRODUCTION OF PAYMENT

FOR

THE SERVICE OF WATER SUPPLY

#### STRATEGY PAPER

#### PAPER NO. S2: INTRODUCTION OF PAYMENT FOR THE SERVICE OF WATER SUPPLY

#### 1. PREAMBLE

One of the present objectives in rural water supply is to cover the reasonable needs for sufficient and clean water of the people in rural areas. Rural water supply is very costly - operation and maintenance costs are mainly dictated by the enormous areas to cover. To be able to sustain a reasonable level of service, a contribution from the user, however poor, is inevitable. In order to assess the users' perception of, amongst others, payment for water, an audience research was carried out in May 1993. One of the conclusions of this research was that people are willing to contribute to the costs of Operation and Maintenance (O&M), especially if the relation between payment and results is directly visible. The communities generally consider the water supply system to be public property, as they provide the labour during construction. It can be concluded from the research that the communities in rural areas are eager to assume their responsibilities, especially in respect of O&M.

The Water and sanitation Policy (WASP) document supported by Cabinet clearly indicates that the service of water supply must be paid for; the policy forms the basis for this strategy paper:

Firstly, the Government policy on payment: "Payment by the community should as a general rule always apply for operation and maintenance costs although there may be cases where a subsidy may be granted."

Secondly, the government policy also advocates a form of ownership by the community(i.e. user ownership), thus ensuring accountability and responsibility for operation and maintenance by the community. The policy envisages that encouraging communities to take cooperative responsibility will be a significant catalyst for social development.

Thirdly the government and the community have to work together on an equal basis, whereby the community will be involved on a high level.

Namibia has successfully implemented community participation during the phase of construction. This can be attributed partly to the high level of political awareness (among residents) and partly to the effective style of implementation by DRWS. Although the involvement has been focused on the contribution of labour, in future a greater participation throughout all phases of the water supply is anticipated. The general objective is to accomplish user ownership and transfer the responsibilities for local O&M to the community.

An important step will be the introduction of payment for all costs of O&M, as is the case at present with bulk water charges. The inclusion of capital costs could be considered as a step to be taken in the distant future. Presently the capital costs constitute about 50-80 % of the costs of water supply.

The contribution in labour by the rural communities is a contribution not made by urban users. For example the communities around Okahao and Onaanda saved about N\$ 4 million on the capital costs (about 20%) by doing the labour themselves. Part of this money could be ploughed back for training to prepare the community to perform (community based) management activities. This is expected to result in a reduction of overhead and O&M costs.

A major condition for successfully implementing payment for water is the willingness and ability of the user to pay. The audience research carried out by the DWA and UNICEF in May 1993 provided a realistic perspective upon which the present proposal for payment of O&M costs is based.

Previous administrations attempted to support the rural water supply infrastructure as a free service to the user communities. As well as being prohibitively expensive, some development analysts contend that this approach encourages a dependency culture and hinders community development. It is sometimes considered that people are not willing to pay for water and that if payment for water was to be introduced it would result in chaos. Looking at the contribution the people in the pilot projects made for digging the trenches, 60 - 80 cm deep, which is heavy work in compacted soils rich of clay or pure lime or volcanic rock, doubts should arise about the alleged unwillingness to contribute to a good water supply. The audience research underlined that people are willing to contribute, at present they collect incidentally money for certain repairs to be made to keep the water point going, or to cover transport costs and to send a representative to Oshakati to report certain problems. This is a fair starting point from which the payment for the service will have to be introduced.

If payment is introduced one should emphasise that payment is for the <u>service</u>. It is true that water comes from heaven and is therefore free, but the service rendered to collect, clean, treat and transport the water, install and maintain equipment must be paid for. In order to make the relation between costs and effort clearer for the community to understand and control, the costs of operation and maintenance have been divided into two parts:

Part one; Local O&M consisting of those activities that have a direct and visible relation between the action (e.g. repair) and the contribution (by the community).

Part two; Those O&M costs less visible to the community, i.e. those incurred by the (water supply) implementing agency (e.g. DRWS).

Before any payment for the service of water supply will be acceptable the relation between water supply and costs must become well rooted in the society. This could most probably be done through gradually extending the local level O&M costs. At a later stage, once a certain level of understanding has been achieved, the local O&M responsibility should be increased to the level that it includes all costs of local O&M. Once this is well rooted the payment may become consumption related following the introduction of an appropriate tariff.

#### 2. OBJECTIVE

The objective of this payment strategy is to eventually have all O&M costs paid for by the user.

The short term (15 years) objective is to have all domestic consumers pay for water to cover the actual supply costs.

The long term (25 years) objective is to add capital costs to the full supply costs.

#### 3. IMPLEMENTATION STRATEGY

It is proposed to gradually introduce payment from a low level to the maximum possible. This introduction of payment needs constant monitoring, evaluation and, if need be, adjustment. The proposal identifies three phases before reaching the fourth one where water is paid for on the basis of a metered tariff calculated to recover the full O&M and capital costs. The figure below gives a graphic impression of what is envisaged.

must be achieved. It is inevitable that it will take at least 10 years to reach such a level. During this phase the ability to pay will come into the picture, a Socio-Economic study will be required to determine the increments.

Phase six:

By this time the strategy applied to achieve full coverage of all O&M costs has been successful, however, the capital costs are not recovered. In the time between 1994 and 2011 the capital costs may have to be included in the water tariff for the bulk water to the municipalities. Consequently a new strategy must be developed to achieve the level of full recovery of all costs in order to have an economically viable rural water supply. The plans to be drawn up at the start of phase six will depend on the Socio-Economic situation of the individual communities at that time. It is considered unlikely that any future policy will seek the repayment of the capital costs of existing rural water supply infrastructure, the capital cost element is more likely to involve a contribution towards future capital replacement costs.

One of the technical consequences of the introduction of payment in this way is that all water points will have to be fitted with water meters. This is one of the reasons that a water meter is included in all of the standard water point designs.

A major social consequence of the introduction of payment will be the setting up of the local water committees and water point committees. These will require legal status both to be able to collect funds and to enter into a formal agreement with the DRWS for user ownership.

The timescale for introducing payment will be dictated by two major factors; the rate of economic development of individual communities and by the growth of extension capacity within the DRWS.

#### 4. EXTENSION MESSAGE

Although it has been found that communities are in general willing to contribute to the costs of improving, operating and maintaining their water supply, the reality of removing the existing government subsidies is an obvious matter of concern. Where the subject of removing free diesel supplies has been raised with water committees at an early stage, it has overshadowed discussion of all other issues. Inevitably the water committees suspect that the whole of the government's rationale for establishing the community participation structure is to avoid payment of this subsidy. Any notion of community empowerment can easily become sidelined and mutual trust becomes more difficult to establish.

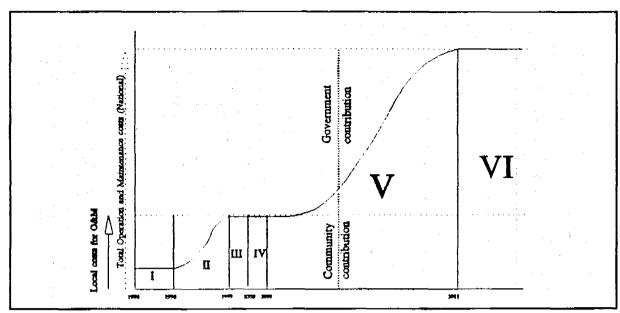
The extension message must therefore establish two points in the mind of the community before the subject of payment is discussed:

the purpose of the community participation structure (water committees) is to allow people to gain
greater control over their own livelihood and to promote self-reliance

and

 government assistance is available to all communities who are willing to organise themselves for the purpose of improving their water supply.

As the proportion of water supply cost borne by the community increases, so will the amount of control that they have over the level of service that they receive. Unfortunately the level of service is limited by physical factors; water is a limited resource. The extension service must therefore provide proper education in sustainable source management. Over-provision of water can also have other detrimental effects, such as the potential for overstocking, of which the community needs to be fully aware.



Implementation of payment for water.

Phase one:

The payment is introduced based on contributions to cover direct visible maintenance expenses to be made by the community. This is in acordance with the habits and practises already in use amongst many people in the rural areas. Directly from the start the final objective of having all expenses covered by the users will be part of the extension message. It will require sensitivity to build this concept into the extension message if enthusiasm and trust are to be encouraged. Emphasis will be put on the responsibility of the community as owner and as partner of the Government.

Phase two:

The contribution is gradually increased over a period of two to three years, in the same period all water points are to have well established water point committees. The contribution is increased to the level of full coverage for local O&M costs. The length of this period will mainly be dictated by the appointment and equipping of RWEOs and only secondly by the capacity of the communities.

Phase three:

During this phase the payment by the communities is maintained at a steady level, in order to assure that the concept of payment for the service of water supply becomes well rooted in the society. Once the time is ripe a flat rate will be introduced during phase three. The new tariff must maintain the same level of costs for the community. The limited economical capacity of rural areas does not allow for two or more steps at the time, besides some resistance may have to be overcome. The freedom for contribution when finances are needed is stopped and replaced for a monthly flat rate.

Phase four:

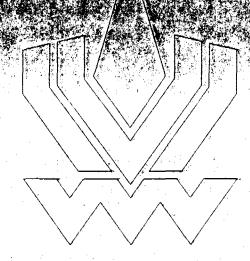
While again the costs for the community is maintained at a steady level the way of payment is changed. The flat rate will be abolished, the payment will now be related to the water consumed. This phase will be difficult and needs close monitoring, whilst the payment by the community will be based on water consumed the financial impact on the community as a whole may not increase. With a well motivated extension staff and flexible administration team it should be possible to transform the payment from a flat rate to a metered tariff.

Phase five:

Once the metered tariff is established the price can gradually be increased, taking into consideration the social and economic developments of specific areas and the country as a whole. Ultimately the level of total recovery of all Operation and Maintenance costs

### DEPARTMENT OF WATER METARS

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STRATEGY PAPER NO. S3

SECTOR COORDINATION

#### STRATEGY PAPER

PAPER NO.S3: SECTOR COORDINATION

#### PREAMBLE

The sector of rural water supply in Namibia is the responsibility of the Directorate of Rural Water Supply (DRWS). However, there are many other organisations who are active within the sector and the activities of the DRWS have an influence on many other sectors. It is therefore of vital importance that effective channels for coordination are established.

The detailed knowledge that exists within the DRWS concerning the rural water supply sector is an invaluable resource to policy makers. It is also essential that consideration of the rural water supply sector is reflected in national policy decisions. Therefore the DRWS must be an active contributor to the development of national policies, particularly in the overall field of water and sanitation.

The Water Supply and Sanitation Sector Policy of the Government of Namibia (WASP), which was approved by Cabinet on the 21st September 1993, appoints the Department of Water Affairs as the focal agency for the overall water and sanitation sector, which includes bulk water supply. Coordination at this overall level will be accomplished through the establishment of a National Water Supply and Sanitation Coordination Committee (WASCO). The DRWS will be an active supporter of this committee. The Permanent Secretary has requested that the groundwork be layed for establishment of WASCO and this task has been delegated to the DRWS.

All of the organisations who are active in the rural water supply sector need to know what other organisations are doing. This helps to avoid duplication of effort and encourages cooperation in place of conflict. Where conflict does arise, coordination allows it to be resolved within a rational structure. A forum where these organisations can meet with each other and with the DRWS promotes mutual support and therefore gives additional strength to all of the participants.

The DRWS, once it has formulated a strategy for any particular subject, needs to be able to communicate that strategy to other organisations who are active in the rural water supply sector. This is not a one way process. Since the other organisations are expected to work in a way that integrates with DRWS activity, it is right that their expertise and aspirations should be incorporated in the DRWS strategies. This aspect is particularly relevant to the subject of technical standardisation and identifying a common approach to community based management.

In November 1993 the DRWS organised the establishment of a rural water supply and sanitation sector coordinating body; "The National Water and Sanitation Forum". This body brings together Government and Non-Government organisations who are active in the rural water supply and/or rural sanitation sectors. Regional Water and Sanitation Forums which coordinate activities on a local level are also being formed. It is anticipated that the Regional Water and Sanitation Forums will form close links with the Central Water Committees in each rural water supply region.

The National Water and Sanitation Forum has created four sub-committees to deal with specific issues:

Newsletter Editorial Board
Technical Standardisation Sub-Committee
Sanitation and Water Sub-Committee
Community Management Sub-Committee

#### 2. OBJECTIVE

The objective of this strategy paper is to present the current structures for coordination within the rural water supply sector and to reflect current proposals for developing DRWS coordination activities.

#### 3. RURAL WATER SUPPLY SECTOR ACTORS

The sector actors can be divided into four groups, namely;

The Government
The Beneficiaries
External Support Agencies and Namibian Non-Government Organisations
The Private Sector

#### 3.1 The Government

It is the government's responsibility to provide the country with a sustainable infrastructure for water and sanitation. An obvious consequence is that the government needs to supervise, monitor and, to a large extent, control activities in the sector. Development and implementation of WASP will require the input of a large number of government and other agencies. This is recognised within the policy itself which calls for the establishment of WASCO.

At the level of rural water supply, there is an interface between the responsibilities of the DRWS and other government agencies. The most important interfaces are with the agencies responsible for:

Agriculture
Rural Sanitation and Health
Rural Engineering Services
Works
Local Government

and Lands and Resettlement

All of these agencies should be actively involved in the National and Regional Water and Sanitation Forums

As the part of the government responsible for the rural water supply sector, the DRWS has its own expectations as to what it hopes to achieve from coordination within the rural water supply sector:

- to exercise reasonable control over the sector
- all actors to work within the guidelines of the national sector policy
- uniform implementation according to a national plan of action
- uniform implementation according to a national strategy
- annual evaluation of national progress
- increase the national institutional capacity
- implement sustainable water supply and sanitation
- implement socially and technically sound programme of water supply and sanitation
- implement environmentally sound projects
- other actors to assist in developing policies and strategies
- other actors to assist there where the government can not function as required

The large number of agencies active in the field of rural water supply require proper advice on planning and control of projects as well as implementation within the context of the Namibian environment. There is an increasing demand on the Directorate's staff for assisting in coordination and/or implementing

activities of other sector actors. Also with increasing frequency the Directorate is confronted with requests for assistance in staff or kind. One of the messages that the DRWS wishes to put across to the other sector actors is that meeting these requests leads to a significant drain on the limited resources available. Formal routes for coordination allow the DRWS to provide this support in the most efficient manner.

#### 3.2 The Beneficiaries

It is the cabinet's decision that rural water supply in Namibia will be implemented with a high level of community participation; the end users will be involved from pre-planning continuously through all the phases that can be recognised in rural water supply. This approach is considered the most appropriate way to establish sustainable rural water supply. Concerted and coordinated action by all the actors in the sector is essential to obtain a manageable and sustainable involvement of the community.

The community participation structure of Central Water Committees, Local Water Committees and Water Point Committees is currently being introduced and in some densely populated areas it is already operational.

The Central Water Committees are invited to be represented on the Regional Water and Sanitation Forums.

#### 3.3 External Support Agencies and Namibian Non-Government Organisations

There are many external support agencies and Namibian non-government organisations who are active in the rural water supply and rural sanitation sectors. Many of these would maintain that the two sectors can not be separated. Their reasons for being active in the sector(s) stem from a range of moral, humanitarian and political motives.

In general these actors have the following expectations as to what they hope to achieve from coordination within the rural water supply sector:

- to be offered the opportunity to help
- to be able to implement projects in their areas of preference and with their philosophy
- to advise the government on policy and strategy matters
- to coordinate their activities with those of other sector actors
- to have good lines of communication with other actors
- to be of influence in the sector
- to have a registration of actors in the sector
- to strengthen the formal and informal sector in the country

#### 3.4 The Private Sector

Much experience and expertise of rural water supply projects exists within the private sector. This has been accumulated over the years through work commissioned by government and external support agencies. The DRWS has much to gain through involving the private sector in sector coordination. The obvious drawback to involving the private sector in sector coordination is that individual commercial interests may adversely affect the positive contribution that could be made. Private sector firms have expressed enthusiasm for participating in sector coordination activities.

#### 4. WASCO

#### 4.1 Terms of Reference

One of the WASP recommendations is to establish and institutionalise a national Water Supply and Sanitation Coordination Committee (WASCO), encompassing the concerned governmental and other agencies involved in the water supply and sanitation sector. The WASP committee regarded WASCO as the future pivot for the development of the sector.

#### WASCO Aim:

The WASP document identifies two aspects which highlight the need for coordination:

- the recommended responsibility allocations, which imply a sequential involvement of different (governmental) agencies,
- the large number of non-governmental agencies active in the water and sanitation sector,
   requiring proper advice on planning and control.

The purpose of establishing WASCO is therefore:

 to create a forum to enhance communication between, and national coordination of, all agencies who are active in the water and sanitation sector of Namibia.

#### **WASCO Objectives:**

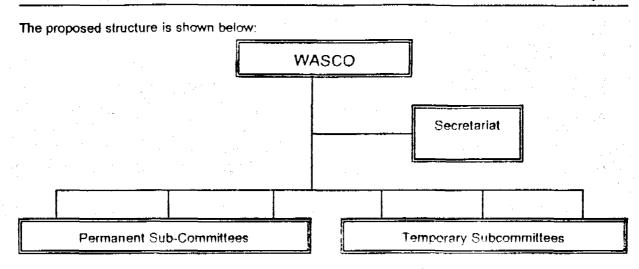
The proposed terms of reference for WASCO are:

- to advise the Minister for Agriculture, Water and Rural Development on sector policy issues.
- to resolve the practical sector issues such as overall planning, coordination and the determination
  of priorities.
- to promote documentation and dissemination of sector related information.

#### 4.2 WASCO Structure

The proposed structure for WASCO is:

- a main committee,
- permanent sub-committees
- temporary sub-committees and
- a secretariat.



This structure deviates slightly from the one proposed in the WASP Report. The changes are the result of experience gained in the field of sector coordination by the Directorate of Rural Water Supply during the period since the approval of WASP.

Although the WASP document suggested a Sector Council, composed of Permanent Secretaries, an Executive Committee and permanent or ad-hoc Sub-Committees, experience has taught that the number of management levels should be kept to a minimum.

It is therefore recommended to introduce only 2 levels of management, i.e. a Main Committee and permanent or temporary Sub-Committees.

A Secretariat will be responsible for the administrative and financial matters of WASCO.

#### 4.3 Main Committee

#### Task:

The task of the Main Committee is to address policy issues, overall priorities and crucial conflicts, to disseminate information and take initiatives of importance to the national water and sanitation sector.

#### Membership:

Chair:

- Permanent Secretary to the Minister of Agriculture, Water and Rural Development

Deputy Chair:

- Deputy Permanent Secretary for Water Affairs

Members:

- Permanent Secretaries (or Deputies) for:

Ministry of Health and Social Services

Ministry of Regional and Local Government and Housing

Ministry of Works, Transport and Communication

- Directors (or Deputies) for:

Directorate of Engineering and Extension Services

Directorate of Rural Water Supply National Planning Commission

- A representative from each of the permanent sub-committees.

The Government Agencies with direct representation on WASCO (apart from the National Planning Commission) have been selected because they have been allocated specific responsibilities through WASP. The National Planning Commission has been selected because of its need to be involved in, and Informed of, national planning issues. Other Government Agencies, External Support Agencies, Namibian NGOs, Consumer Representatives and Commercial Organisations (including WatCom) have influence on the sector through their participation in the permanent and temporary sub-committees.

#### Meetings:

The Main Committee should meet quarterly.

It can also initiate ad-hoc meetings on specialised issues, in emergencies or when a conflict arises within the sector or with other sectors.

The first meeting will have the form of an Inception Meeting, where WASCO will be consolidated.

#### Inception meeting:

The Inception Meeting will be initiated by the Permanent Secretary for Agriculture, Water and Rural Development. The Inception Meeting will, among other things, finalise:

- the Terms of Reference for WASCO
- the proposed structure of WASCO
- the membership of the Main Committee of WASCO
- the staffing of the Secretariat
- the number and terms of reference of the permanent sub-committees
- the criteria for membership of the permanent sub-committees
- the selection of a Coordinator for each permanent sub-committee
- the schedule of regular meetings for 1995
- the extent to which WASCO should be institutionalised within the forthcoming Water Act

#### 4.4 Sub-Committees

Opinions differ as to how many sub-committees to WASCO are required and what their terms of reference should be. This is one of the issues that must be resolved by the members of the main Committee at the inception meeting.

It is suggested that the following potential sub-committees are considered:

- The National Water and Sanitation Forum
- Rural Water Consumers
- Urban Sanitation
- Bulk Water
- Environmental Resource Management
- Technology and technical standards

#### Task, Membership and Meetings:

These issues will be addressed in detail by the Coordinator of each individual sub-committee, appointed by the Main Committee. The Coordinators will report to WASCO at the first meeting after the Inception Meeting. This could have the form of an ad-hoc meeting.

In some cases a body exists already which could evolve into a WASCO sub-committee. In these cases the coordinator should be the chairperson of that existing body.

#### National Water and Sanitation Forum

The National Water and Sanitation Forum is at present the national coordinating body for the rural water supply and sanitation sector. It encompasses External Support Agencies, Namibian NGOs, Donor Organisations and Government Agencies who are active in the field of rural water supply and sanitation. This coordinating body was initiated by the Directorate of Rural Water Supply in the Department of Water Affairs. The Forum could become, without any alteration, a permanent sub-committee of WASCO.

#### **Rural Water Consumers**

The Directorate of Rural Water Supply is currently establishing a structure of Water Point Committees, Local Water Committees and Central Water Committees to represent the interests of rural water supply consumers. This is in line with WASP which states that the rural water supply sector is to be developed with the maximum involvement of the rural communities. It would be a natural progression for the chairpersons of the Central Water Committees to come together to resolve issues of national concern to them in conjunction with the Directorate of Rural Water Supply.

#### **Urban Sanitation**

WASP divides the responsibility for sanitation in towns and municipalities between central government agencies, local government and consumer representatives. The division of responsibilities, for all of the cases considered by WASP, implies both sequential and contemporary involvement of the different organisations. There is a continuing need to develop the national policy into practical procedures and to have a forum for discussion of individual cases as they arise. It is therefore necessary to establish a permanent sub-committee of WASP to resolve these issues. The sub-committee could also act as an arbitration body for disputed discharge consent cases.

#### **Bulk Water**

With the possible establishment of WATCOM in 1995 there will be a need for a forum where bulk water consumers, suppliers and the Department of Water Affairs can air their concerns and achieve resolutions to contentious issues. It is suggested that this forum should have strong links with WASCO and in fact be a permanent sub-committee to it.

#### **Environmental Resource Management**

The WASP document states clearly that water resources are to be developed in an environmentally sustainable manner. This requires that the utilisation of water resources is controlled with the utmost care. However, the immediate demands of water consumers are not easily reconcilable with the demands of the environment or with the requirement for sustainability. This subject is closely linked to the competing demands of different consumers for the limited quantity of water that can be abstracted on a long term basis.

These issues are of national importance and must therefore be dealt with through democratic means at a national level. It is proposed that a suitable forum for the identification and implementation of a national plan for the environmentally sustainable development of water resources would be a permanent subcommittee of WASCO.

It should be noted that successful initiatives towards achieving this aim have existed in the past. Firstly the Advisory Water Board, which has not met for a number of years, used to advise the Minister on these matters. It is suggested that the sub-committee could assume many of the functions previously undertaken by the Advisory Water Board, particularly in hearing appeals concerning water abstraction permits. This would require the formal dissolution of the Advisory Water Board.

The second example of successful public consultation relating to development of water resources was the presentation of the Central Area Water Master Plan.

#### **Technology and Technical Standards**

The Technical Committee of the Department of Water Affairs is at present a well established advisory committee and could form the core of the proposed sub-committee for Technology and Technical Standards. The proposed status of this committee following commercialisation is uncertain at present, but some of its members will transfer to the commercialised entity whilst others will remain with the Department of Water Affairs. If the present committee were to become a permanent sub-committee of WASCO then current members should be retained. However, it will be advisable for the WASCO sub-committee to widen the membership to involve other organisations where a wealth of technical experience exists, particularly in the private sector.

It should be noted that there is also now a Technical Sub-committee of the National Water and Sanitation Forum which hopes to develop close links with the proposed sub-committee for Technology and Technical Standards.

An alternative approach for this subject area is for the main WASCO committee to create temporary subcommittees to deal with individual technical issues as they arise.

#### 4.5 Secretariat

The Secretariat will be responsible for the administrative and financial running of WASCO.

The Secretariat will be headed by the Deputy Permanent Secretary for Water Affairs assisted by an administrative team.

#### 5. THE NATIONAL WATER AND SANITATION FORUM

In order to encourage coordination within the rural water supply sector the DRWS organised the establishment of the National Water and Sanitation Forum in November 1993. The DRWS emphasises the point that, although it provides the secretariat for this forum, it is an equal partner with the other members.

This body encourages External Support Agencies and Namibian NGOs to meet each other. This is of particular importance for the local NGOs.

#### 5.1 Terms of Reference

The members of the National Water and Sanitation Forum have agreed on the following Terms of Reference:

#### Aim:

The aim of the coordinating body is to create a forum to enhance dialogue and coordination in the water supply and sanitation sector.

#### Objectives:

☐ To make recommendations to government on planning, policies and strategies:

- Keep an updated list of existing and forthcoming plans, policies and strategies and distribute this
  Information.
- Organise seminars or workshops to discuss the plans, policies and strategies as the need arises
  or as requested by the government.

☐ To collect and exchange information and ideas:

- Keep and update the register of sector actors and provide the information on request.
- Edit and distribute a "Newsletter" through an "Editorial Committee" to all members of the sector coordinating body and to all other actors involved, such as regional councils etc.
- Provide information on and access to other data-banks.

☐ To promote sustainable sector development

- Through community participation
- Through involvement of women
- Through standardisation

#### ☐ To discuss sector issues:

- Review of the terms of reference periodically
- Drought crisis planning
- As issues arise

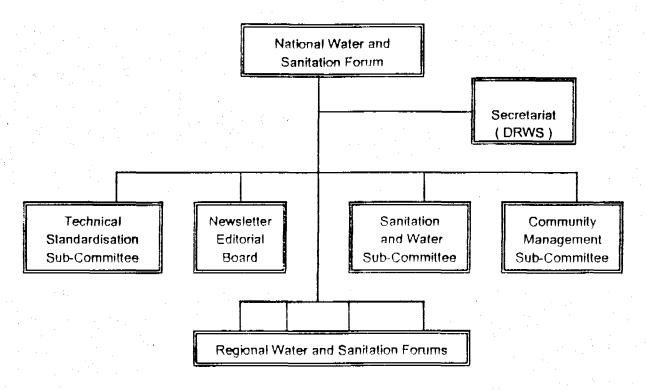
#### 5.2 Structure

The National Water and Sanitation Forum meets every two months or so. The task of chairing the meetings rotates amongst the members. DRWS provides the secretariat for the forum, organises meetings and writes and distributes the minutes and agenda.

Membership of the forum is open to all organisations who are actively involved in the sector of water supply and sanitation.

The National forum has encouraged the setting up of Regional Water and Sanitation Forums and also created four sub-committees. DRWS is represented on all of the sub-committees.

The structure is shown below:



#### 5.3 Sub-Committees

#### Newsletter Editorial Board

The National Water and Sanitation Forum produces a Newsletter and distributes it amongst its members and to other interested parties. The newsletter provides information relevant to the sector and news of recent developments. Articles are included which describe the activities of member organisations and discuss technical issues. DRWS is represented on the Editorial Board.

#### **Technical Standardisation Sub-Committee**

The Technical Standardisation Sub-Committee considers technical issues refered to it by the national forum. Its first task is to resolve the critical issue of handpump standardisation.

It is envisaged that this sub-committee will be able to produce recommendations on technical standards relevant to the rural water supply and sanitation sector. It does not carry sufficient status to constitute an approving body in its own right. Recommendations will be forwarded for consideration by the Department of Water Affairs Technical Committee. Once approved, the standards will be available to all sector actors who will be expected to abide by them.

Standardisation will have benefits for all who are involved in the sector.

#### Sanitation and Water Sub-Committee

The purpose of the Sanitation and Water Sub-Committee is to consider the best wayto streamline the efforts being made to improve sanitation and water supply. At present the boundaries of responsibility for these issues are badly defined within the government agencies. This emphasises the need for proper coordination.

#### Community Management Sub-Committee

There is a need to promote a common approach to promoting community based management of rural water supply and sanitation. The aim of this sub-committee is to define, within reasonable limits, what that approach should be. Once a common approach has been agreed, it is envisaged that the sub-committee will be able to produce guidelines for the training of extension officers and a framework for community training.

#### 5.4 Regional Water and Sanitation Forums

The establishment of Regional Water and Sanitation Forums is being encouraged in the Rural Water Supply regions.

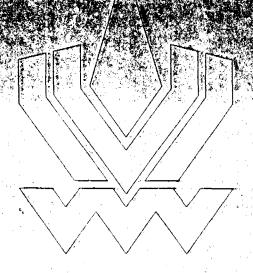
The purpose of the Regional Water and Sanitation Forums is to encourage coordination and exchange of information on a more specific level than can be achieved within the national forum. The regional forums are also better placed to promote mutual support between individual projects and implementing organisations.

The Central Water Committees are invited to be represented on the Regional Water and Sanitation Forums.

Regional Water and Sanitation Forums are autonomous but there must be formal lines of communication with the national forum to ensure adequate flow of information between the two levels.

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### DECEMORATE OF RURAL AVAILABLE SUFFIX



### STRATEGY PAPER NO. S4

LEGAL STATUS

OF

WATER COMMITTEES

#### STRATEGY PAPER

#### PAPER NO. S4: LEGAL STATUS OF WATER COMMITTEES

#### PREAMBLE

The WASP document allocates many functions to "Informal Consumer Representatives". In terms of the rural water supply sector these representatives correspond to the Water Point Committees, Local Water Committees and Central Water Committees currently being established by the DRWS. The allocated functions require that the water committees have both rights and responsibilities. The fact that these representatives are recognised within the Government Policy means that they must acquire a certain status so that they can achieve that recognition in reality. Respect and recognition for the water committees is required from three main directions:

from within the communities that they represent from the Directorate of Rural Water Supply from other parties

The purpose of this strategy paper is to describe some of the situations in which the legal status of water committees will be relevant and to present the views of the Government's legal advisors as to how that legal status may evolve over time.

#### 2. RELEVANT CIRCUMSTANCES

#### 2.1 Community Representatives

The water committee is the means by which the community can speak with one voice. Every community member needs to feel that the water committee is a legitimate means of expressing the opinions of the community. The DRWS must make an effort to ensure that the committee which they deal with is truly representative of all sections of the community. This is currently achieved through the model guidelines supplied by the DRWS. It is anticipated that the guidelines will develop over time into a model constitution for the water committees.

#### 2.2 User Ownership

The fact that the DRWS is prepared to hand over a significant responsibility for the care of water point equipment to the water committee means that the committee must have substance. As the water committee develops the water point it may acquire material assets of its own. As the body entrusted with "user ownership" or as the actual owner the water committee becomes a legal entity.

#### 2.3 Water Supply Agreement

Where a water supply agreement has been entered into which involves the rendering of accounts for water supply, the water committee takes full responsibility for payment. In the long term it will become necessary for the supplier, in cases of default, to be able to take legal action to recover unpaid accounts.

#### 2.4 Abstraction Licence

It is theoretically possible that in the future communal farms will be established within subterranean water control zones. In this case the water committee would be the licensee.

#### 2.5 Collection of Money

Where the water committee is responsible for paying water accounts, it requires authority to collect money from community members. Experience will show whether their authority needs to be reinforced through the acquisition of a formal legal status.

#### 2.6 Exclusive Water Rights

Water committees need to be able to control who has access to their water point. It is unjust that outsiders who make no contribution to the upkeep of the water point should be allowed access without the permission of the water committee. The DRWS will, to the best of its ability, support communities who wish to protect their own water resources.

#### 3. IMPLEMENTATION

The question of how far and how fast the DRWS should go in formalising the legal status of water committees has been put to the Attorney General's legal advisors. The advice received from the Attorney General's office suggests that the legal status of water committees should be allowed to evolve gradually. This implies a reactive rather than a proactive approach. The authority of water committees will grow as a result of individual precedents rather than predetermined policy. The reasons given for adopting this approach are:

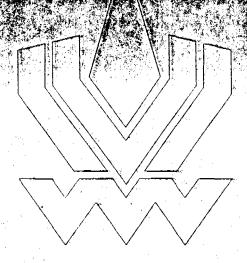
- the number of legalistic administrative steps that would be required and
- the possibility that over-formal agreements will imply mistrust.

The letter of advice from the Attorney General's office conludes thus:

"We are aware of the unusual situation that as legal advisors to the Government, we are actually advocating the execution of agreements which do not provide full legal protection to the parties concerned. However, in order to build up such a valuable resource as the long-term cooperation of the communities involved in the support of the local water supply, it is our considered opinion that such agreements could as well gradually grow into agreements in the legal sense of the term, without putting either party at a disadvantage. Such gradual growth could for instance be determined against the level of complexity of the agreements, e.g. in financial or administrative terms."

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STRATEGY PAPER NO. S5

MONITORING AND EVALUATION SYSTEM

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#### STRATEGY PAPER

#### PAPER NO. S5: MONITORING AND EVALUATION SYSTEM

#### 1. PREAMBLE

In order to manage the rural water supply infrastructure effectively it is considered essential that a reliable and up to date record of all water points be established. Once the basic record has been compiled it will be possible to implement a system for maintaining the accuracy of the record as developments take place. It will also be possible to implement a monitoring system in order that the performance of the infrastructure and organisation can be evaluated.

For a monitoring and evaluation system to be effective it has to fulfil a number of conditions:

- Firstly it should establish what exactly it wants to achieve and what it would like to know. Only than can the right questions be asked.
- Secondly the people who do the monitoring and evaluation have to be convinced of the usefulness of the exercise.
- Thirdly the data to be collected and evaluated should be limited to avoid an excess of paperwork.
- Finally the forms and questionnaires used must be user-friendly and adapted to the capabilities
  of the user.

#### 2. OBJECTIVES AND ORGANISATION

The objective of the monitoring and evaluation exercise for the rural water supply sector is to improve the planning, implementation and management skills of the community managed schemes, both for the DRWS and the various Water Committees.

In their training programmes, the Rural Water Extension Officers should be made aware and convinced of the importance for themselves and for the community of a monitoring and evaluation system. They should also be able to convince the Water Committees of the usefulness of such a system.

The main actors in the monitoring and evaluation activities will be the Water Committees, who are really in charge of the rural water supply schemes and who are closest to the actual users of the schemes, and the extension officers.

Each of the main actors within the Water Committees will be provided with a standard form, adapted to their situation, which should be returned monthly or quarterly as appropriate. The main forms will be:

Caretaker's Log Book

- to be fifled in daily, one page per month.

WPC Treasurer's Account Book - to be kept up to date at all times.

WPC Monthly Report

to be completed after each WPC meeting.

Scheme Caretaker's Log Book - to be filled in daily, one page per month.

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LWC Treasurer's Account Book - to be kept up to date at all times.

LWC Quarterly Report

- to be completed after each LWC meeting.

Note: WPC = Water Point Committee

LWC = Local Water Committee

The Central Water Committee (CWC) will not be provided with a standard form; they will report by distributing the minutes of their meetings.

The forms include the questions which are relevant to the objectives and phrased in such a way that filling in is sufficiently easy but still allowing scope for elaboration. This will provide for a free flow of information and will give the extension officer sufficient information to analyse and evaluate the functioning of the scheme.

The extension officer will take remedial action as required and will report, in a standardised out-line, to his or her supervisor for review.

The standardised outlines for the extension officer's reports are designed to fulfil a number of functions:

- The extension officer is encouraged to plan his or her future activities.
- The extension officer is encouraged to evaluate the information provided by the water committees so that successful and unsuccessful approaches can be identified.
- Areas of difficulty are highlighted.
- The extension officer is encouraged to evaluate his or her own performance.
- The extension officer is encouraged to seek his or her own solutions to areas where their own performance could be improved.
- The report allows successful and unsuccessful approaches to be recorded and communicated to others.
- The report provides a basis for a joint review of the extension officer's activities with his or her supervisor.
- The report enables the extension officer's supervisor to evaluate the extension officer's performance.

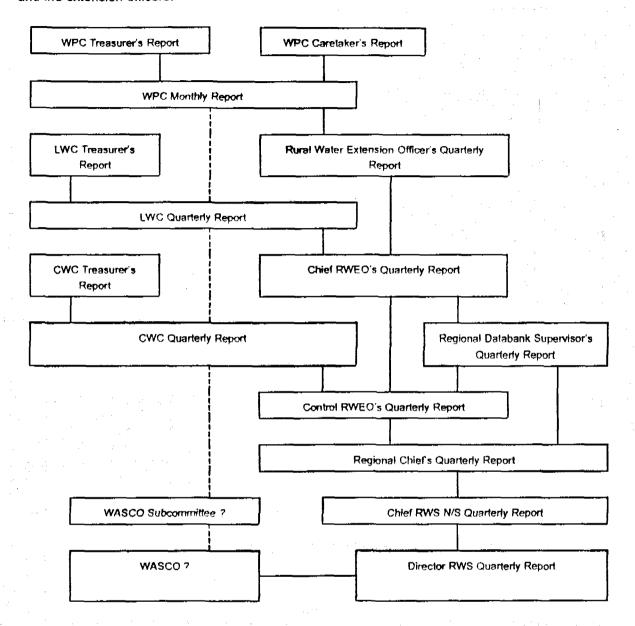
The extension officer is also responsible for ensuring that the information collected is properly recorded by the DRWS at Regional level.

In addition to this continuous flow of dynamic information, the DRWS will need to maintain records of the more permanent features of each water scheme. These records will include such aspects as the technical details of the scheme, the demand factors of the scheme, and the membership of the various water committees. Standard forms which are already in use for these records include Water Point Data Sheets and Installation and Equipment Reports. New forms have been designed to record water committee details, namely the Water Point Committee Record Form the Local Water Committee Record Form and the Central Water Committee Record Form.

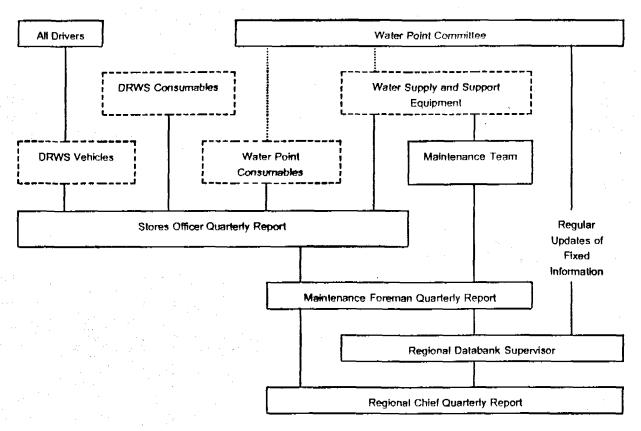
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The flowchart below indicates the reporting responsibilities of the various water committees, their officers and the extension officers.



The flowchart below indicates the reporting responsibilities of the regional DRWS Officers.



#### 3. RURAL WATER SUPPLY DATABANK

#### 3.1 PURPOSE

It is suggested that to obtain the maximum benefit from the information collected through monitoring, a computerised databank should be established. In order to exercise effective control over the DRWS, managers at both Regional and National level will require access to this information; effective management requires the ability to make informed decisions. In addition, ready access to information will allow management to demonstrate easily the extent to which planning objectives are being achieved.

The databank will hold two types of information; fixed and dynamic. Fixed information does not change very often, it includes such items as water point name and the names of water committee members. Dynamic information can change on a continuous basis or can be generated continuously. It includes such measurements as borehole rest water level, quantity of water supplied and quantity of diesel used.

The reasons for suggesting that the information system should be computerised are as follows:

- Accessibility
- Flexibility
- Reduced staff time input
- Easy to update
- Easy to generate totalising and statistical reports
- Easy to transfer information

#### 3.2 ADMINISTRATION AND STRUCTURE

#### 3.2.1 Regional and National Databanks

The proposed computer databank will exist in two tiers; regional and national.

Each of the ten DRWS regions will maintain an up to date database containing fixed and dynamic information relevant to their area. Information will be held relating to each Water Point, Local Water Scheme, WPC, LWC and the CWC.

The Chief RWEOs are the prime source of information for the databank which must be compiled and entered by the Regional Databank Supervisor.

Reports available at the regional centres will include the following:

- Printouts of fixed information relating to any specific Water Point, Local Water Scheme, WPC,
   LWC or the CWC.
- Printouts or plots of dynamic information relating to any specific Water Point or Local Water
   Scheme.
- Printouts or plots of totalised or averaged dynamic information relating to any group of Water
   Points or the whole region.
- Statistical analysis of fixed information relating to any group of Water Points or the whole region.
- Statistical analysis of dynamic information relating to any specific Water Point, group of Water
   Points or the whole region over a defined period.

The national databank will be fed with information from each of the regional centres. The Regional Databank Supervisors will have a duty to forward a monthly update to the National Databank Supervisor.

The national databank will therefore contain all of the information held on the regional databanks albeit some weeks out of date.

Reports available from the national databank will be similar to those available at regional level. In addition, totalised, averaged and statistical values will be available covering North and South Divisions as well as the country as a whole.

It is anticipated that in the future the databanks will be extended to include information related to DRWS budget and expenditure, however it is considered too ambitious to include these aspects in the initial implementation.

#### 3.2.2 Resource Requirement

In this section the long term resource requirement for maintaining the database is considered. Short term requirements during implementation are considered in section 3.5.1.

#### a) Regional Level

Each of the ten regional offices of the DRWS will require the services of a Regional Databank Supervisor. In the long term it is estimated that this function will occupy one person for 40% of their time. There will be a high initial investment in terms of data entry, and the supervisors themselves will need to spend time being trained and getting familiar with the system. Therefore the databank supervisors will probably be occupied for 100% of their time to start with. It is suggested that the supervisors are drawn from the current structure of administrators or extension officers within the DRWS, and if possible they should have taken part in the initial compilation of the database.

Ten P.C.s and peripherals have been obtained, one for each of the regional offices. Again, it is estimated that in the long term each of these P.C.s will be required for 40% of the time for databank purposes. In the short term the proportion of the time will be a lot greater.

#### b) National Level

At the national level, if the databank is to stand any chance of achieving its objective, the services of a full time National Databank Supervisor will be required.

The National Databank Supervisor will require the full time use of a P.C. and peripherals. One of the Head Office P.C.s will therefore have to be dedicated to this purpose.

#### 3.3 FIXED INFORMATION

#### 3.3.1 Water Point

The fixed technical information relating to each Water Point will fall into the four categories shown below.

#### a) Basic Data

- Water Point Number
- GPS Co-ordinates
- Region
- Locality or area
- Village or farm
- Name of water delivery point

#### b) Demand Information

- Domestic demand based on population
- Institutional demand (Schools, Clinics, etc.)
- Stock Watering demand based on actual number of stock
- Stock Watering demand based on the number that can be supported by the available grazing
- Irrigation demand

#### c) Technical Information

- Format will vary depending on the type of Water Point
- Should only cover the installations and equipment that are under the control of the WPC.
- To include details of all Water Point equipment including engine and pump make, model and serial number, tank and pipeline materials, sizes and diameters etc.
- To include details of initial settings of, for instance, engine speed, pumping rate etc.
- Limited borehole information (full borehole information is held on the Geohydrology database) to include depth, initial RWL, estimated safe yield and WW number.
- As a future development it may be possible to include a diagrammatic layout of the Water Point equipment.

#### d) Water Point Committee Membership

The fixed information to be held concerning Water Point Committee Membership will be exactly as shown on the Water Point Committee Record Form.

#### 3.3.2 Local Water Scheme

#### a) Basic Information

As for the Water Point except that:

- GPS Co-ordinates should relate to a central point on the scheme e.g. pipeline take-off point or be omitted
- No name required for individual Villages, Farms, Water Points or water delivery points

#### b) Demand information

The databank should be able to calculate the overall demand information from the individual Water Points and, as an alternative, be able to accept input of overall demand figures from the user. The user should be given the choice of which method is desired for each Local Water Scheme.

#### c) Technical Information

Where rural water supply equipment comes under the direct control of the Local Water Committee rather than the Water Point Committee it should be listed here.

#### d) Local Water Committee Membership

The fixed information to be held concerning Local Water Committee Membership will be exactly as shown on the Local Water Committee Record Form.

#### 3.3.3 Central Water Committee

#### a) Central Water Committee Membership

The fixed information to be held concerning Central Water Committee membership will be exactly as shown on the Central Water Committee Record Form.

#### 3.4 DYNAMIC INFORMATION

#### 3.4.1 Water Point

The dynamic information gathered from each water delivery point will depend on the type of Water Point to some extent. The aspects to be recorded are reflected in the monthly reports from the Water Point Committees and will always include an indication of the quantity of water provided. For a diesel powered borehole the other information would be:

- Quantity of diesel used
- Hours run
- Oil used

from which it is possible to derive such factors as:

- Average diesel used per m3 of water supplied
- Average flow rate while running

The data bank should allow irregular readings of RWL to be recorded as well as the results of occasional water quality analysis for pH, TDS, Sulphate, Nitrate, Flouride and E.Coli. Spare capacity will be available in the database to include additional records in the future as the need arises.

#### 3.4.2 Local Scheme

Dynamic information related to Local Water Schemes will be derived from the LWC Quarterly Reports. The type of information collected will depend on the type of water points which form the scheme. The databank should automatically totalise appropriate information obtained from each WPC within the scheme to allow comparisons to be made.

#### 3.4.3 Region

The databank should automatically totalise appropriate information obtained from each LWC within the region to provide regional totals of water supplied and diesel used.

#### 3.4.4 National

The national databank should contain all of the dynamic information contained on the regional databanks derived from the regional centres.

In addition, the national databank should automatically totalise appropriate information obtained from each region to provide divisional and national totals of water supplied and diesel used.

#### 3.5 IMPLEMENTATION

#### 3.5.1 Resources

The design and creation of the databank will require the assistance of specialists who are not available within the current structure of the DRWS. Financial assistance for commissioning an external consultant to do this work has been pledged by UNICEF.

Preparation of a consultants brief for identifying technical details of the database and the surrounding information system has been completed. The brief is largely based on this strategy paper. The consultants work will be supervised jointly by the DRWS and the Data Systems Division.

The National Databank Supervisor should be selected at the earliest opportunity in order that he or she can be involved with the design, creation and implementation of the databank as well as supervision of the consultant and liaison with the donor. One of the initial functions of this appointment will be the training of the surveyors needed to compile the basic information in the first place.

Management will need to decide whether this post can be filled using one of the existing postholders within the DRWS or whether a new appointment has to be made. If a person with sufficient knowledge is selected, it will be possible for him or her to provide advice to all DRWS Officers on other aspects of P.C. use.

For initial compilation of the database 20 surveyors will be required nationwide. It is suggested that these

people should be selected from within the existing regional staff of the DRWS, firstly because they will have some familiarity with their region and secondly to avoid the administrative burden and expense of recruiting new staff. The 20 surveyors will not be distributed evenly between the ten regions, Cuvelai will require three or more whilst other regions will only require only one.

In the longer term it is suggested that the Regional Databank Supervisor be selected from the surveyors for that region.

#### 3.5.2 Data Compilation

Creation of the database will be dependent on a comprehensive survey of all existing rural water infrastructure and organisational structures for community management. Support from UNICEF has been pledged in terms of some of the hardware required to equip the surveyors; 22 motorcycles and 20 GPS units. UNICEF have also offered to assist with some of the direct expenses involved.

The first task of the surveyors will be to compile the fixed information for the databank into a uniform data set. Before any field work is started, all of the existing available information needs to be collated. There is in fact a considerable quantity of existing information:

- Existing Regional Office records
- DWA Geohydrological database
- Consultant's reports
- Surveys conducted by NGOs

The quantity of information available varies from region to region and much of it is unreliable. Therefore the accuracy of the existing information will have to be verified, perhaps by carrying out sample checks, before it is included in the database.

#### 3.5.3 Training

One of the advantages of selecting the National Databank Supervisor at the start of the implementation process will be that he or she will require no specific training. If the Supervisor joins at a later date then some specific training will be necessary.

The National Databank Supervisor will be responsible for training and supervising the regional surveyors. This will be an important task to ensure that the surveyors:

- a) understand the reasons for the survey
- b) adopt a uniform approach and
- c) are able to use equipment correctly (including motorcycles)

Training of the surveyors will take up to five days. One course should be provided for all surveyors at a central location, possibly Von Bach training centre.

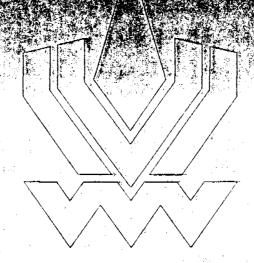
As part of the implementation process the Regional Databank Supervisors will need to be selected and trained. The selection from existing regional DRWS staff will be the responsibility of the Regional Chiefs. Training will be the responsibility of the National Databank Supervisor.

It is anticipated that training of each Regional Databank Supervisor will take place at each regional office at the same time as the databank software is installed. A training period of two days should suffice.

#### 3.5.4 Suggested Timescale

YEAR	1994	1	995	1996	1997
Appoint Consultant		▼			
Select National Databank Supervisor	11 17 A 000 000 11 000 000 000 11	<b>*</b>			
Complete Monitoring Forms and Log Books (Completed)		***************************************			
Design and Create Databank Software	*** > *** *****************************	****			
Select and Train Regional Surveyors	***	<b>*</b>			
Compile Regional and National Databanks					
Select and train Regional Databank Supervisors			<b>V</b>		
Install Regional Databank Software	***************************************		▼		
Evaluation and Revision					
Operation and Use					***

# DESTORATE OF THE AUTOMATIC SUPER



## STRATEGY PAPER NO. S6

RELATIONS BETWEEN THE
CENTRAL WATER COMMITTEE,
LOCAL WATER COMMITTEE,

WATER POINT COMMENTE

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#### STRATEGY PAPER

# PAPER NO. S6: RELATIONS BETWEEN THE CENTRAL WATER COMMITTEE, LOCAL WATER COMMITTEE, WATER POINT COMMITTEE AND THE DIRECTORATE OF RURAL WATER SUPPLY

#### 1. PREAMBLE

On the 21st September 1993 Cabinet approved the WASP report as the guiding policy for the rural water supply sector. One of the major issues in this report is community participation and community management. For the communities to take over the responsibility for the management of their water supply facilities, they have to have a clear indication of their roles and responsibilities on the various levels of operation.

It is important to define the relationships between the Central Water Committee, the Local Water Committee and the Water Point Committee on the one hand and the relationship between them and the Directorate of Rural Water Supply on the other hand.

#### 2. OBJECTIVE

The objective of this strategy paper is to present a framework for the roles and responsibilities of the various committees, formed by the community for implementation and management of rural water supply schemes, and their relationship with the DRWS. The relationships presented are consistent and follow the guidelines provided in the WASP document.

#### 3. THE ORGANISATION OF THE COMMUNITY

Each Region will have a Central Water Committee (CWC), consisting of members, representative of the whole Region. The membership may include elected councillors, traditional leaders and representatives of the local water committees. Annex 1 suggests guidelines for the Central Water Committee.

The main function of the Central Water Committee will be to stimulate the development of rural water supply schemes and to coordinate the activities of the various Local Water Committees in the Region.

The regular meetings of the Central Water Committee will be attended by the Control Rural Water Extension Officer of the DRWS.

NGOs which want to implement new projects should liaise closely with the Central Water Committee.

**Local Water Committees** (LWCs) will be established which will be in charge of a number of individual water points. Membership may include traditional leaders and representatives of the individual Water Point Committees as well as elected community representatives.

The functions of the Local Water Committee are to coordinate the activities of the Water Point Committees and to represent their interests in an effective way to the outside world. The group of water points covered by the Local Water Committee will be in the form of either a distinct scheme, such as a piped water supply scheme, or a group of water points which belong "naturally" together (geographically, traditionally, etc.). In Cuvelai Region some of the rural piped water supply schemes already have Local Water Committees whilst on some borehole schemes (e.g. Hoachanas) the village itself has a Local Water Committee.

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The main tasks of the Local Water Committee are to mobilise the community during the planning, design and construction stages of a project, to assist the RWEO in setting up Water Point Committees and to supervise the Water Point Committees' activities after completion of the project. Local Water Committees enter an agreement with the DRWS with regards to financial and technical responsibilities.

The regular meetings of the Local Water Committee should be attended by the RWEOs working in that area and if possible, or on request, the Chief RWEO. For the Terms of Reference of the Local Water Committee, see annex 2.

For each individual water point a Water Point Committee (WPC) should be established to look after it. Members of the Water Point Committee should be elected by the community that uses the water point.

The main tasks of a Water Point Committee are to operate and maintain its water point and to collect contributions from the users (on behalf of the Local Water Committee). For the Terms of Reference of the Water Point Committee, see annex 3.

All communications between the Local Water Committees or Water Point Committees on the one hand and the DRWS on the other hand must go solely through the RWEO.

4. RELATIONS BETWEEN THE DIRECTORATE OF WATER SUPPLY (BULK), THE DIRECTORATE OF RURAL WATER SUPPLY AND THE LOCAL WATER COMMITTEE FOR PIPED RURAL WATER SUPPLY SCHEMES

In cases where the rural water supply schemes are drawing water from a pipeline belonging to the Directorate of Water Supply (Bulk), (e.g. in Cuvelai Region at present), there are three important relationships to be considered:

- a) Directorate of Water supply (Bulk) / Directorate of Rural Water Supply
- b) Directorate of Rural Water Supply / Local Water Committee
- c) Local Water Committee / Water Point Committee

These relationships are defined by the steps listed below:

- The Directorate of Water Supply (Bulk) will sell water to the Directorate of Rural Water Supply, according to the bulk meter readings, under an agreement, similar to that between the Directorate of Water Supply (Bulk) and a Municipality.
- The Directorate of Rural Water Supply will recover as much of the cost as possible from the Local Water Committees. This will be little in the beginning but should increase over the years. (See Strategy Paper No. S2: Introduction of payment for the service of water supply.)
- The Directorate of Rural Water Supply will enter into an agreement with the Local Water Committees, defining the mutual commitments and responsibilities, financially and technically.
- The Directorate of Rural Water Supply will subsidise the deficits and will provide for them in its annual budget.
- The Local Water Committee must enter into an agreement with the Water Point Committees, to
  define the financial and technical resposibilities of both parties and agree on the methods for
  collecting contributions from the users.

For the foreseeable future the Local Water Committees will not be able to recover from the users the full cost for water, i.e. the price for bulk water and the cost of operating and maintaining the rural water supply

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schemes. The Payment Strategy (Strategy Paper No. S2) envisages a first period whereby the Local Water Committees initially contribute to the cost of operation and preventive maintenance and later cover the entire cost of operation and all maintenance and repairs. This period may take 5 to 10 years or more.

# 5. RELATIONS BETWEEN THE DIRECTORATE OF RURAL WATER SUPPLY AND THE LOCAL WATER COMMITTEE WHEN 'BULK WATER' IS NOT INVOLVED

In cases where the Local Water Committee is in charge of a group of water points having their own source of water (e.g. boreholes or wells), the Directorate of Water Supply (Bulk) will not be involved. Agreements are only required between the Directorate of Rural Water Supply and the Local Water Committees and between the Local Water Committees and the Water Point Committees.

- The Directorate of Rural Water Supply will recover as much of the cost as possible from the Local Water Committees. This will be little in the beginning but should increase over the years.
- The Directorate of Rural Water Supply will enter into an agreement with the Local Water Committees, defining the mutual committments and responsibilities, financially and technically.
- The Directorate of Rural Water Supply will subsidise the deficits and will provide for them in its annual budget.
- The Local Water Committee must enter into an agreement with the Water Point Committees, to
  define the financial and technical resposibilities of both parties and agree on methods how to
  collect contributions from the users.

The Payment Strategy envisages that the proportion of cost recovered from the Local Water Committees will gradually increase until it covers the full technical cost of supporting the group of water points and that the local water scheme will gradually become self supporting.

## 6. RELATIONS BETWEEN THE DIRECTORATE OF RURAL WATER SUPPLY AND INDIVIDUAL WATER POINT COMMITTEES

In some areas it will not be practical to have a two tier system of Local Water Committees and Water Point Committees. In these cases the relationship will be directly between the Directorate of Rural Water Supply and the Water Point Committee.

- The Directorate of Rural Water Supply will recover as much of the cost as possible from the Water Point Committee. This will be little in the beginning but should increase over the years.
- The Directorate of Rural Water Supply will enter into an agreement with the Water Point Committee, defining the mutual commitments and responsibilities, financially and technically.
- The Directorate of Rural Water Supply will subsidise the deficits and will provide for them in its annual budget.

The Payment Strategy envisages either that the proportion of cost recovered from the Water Point Committees will gradually increase until it covers the full technical cost of supporting the water point and that the Water Point Committee will gradually become self sufficient.

#### ANNEX 1:

#### **GUIDELINES FOR THE CENTRAL WATER COMMITTEE**

#### 1. PURPOSE

The purpose of the Central Water Committee is to plan and coordinate the development of rural water supply schemes in their Region. The activities of the Committee should be incorporated in the Regional development coordination body where one is established.

#### 2. MEMBERSHIP

Members of the Central Water Committee must represent the entire Region and all sectors of the community. Membership of the Committee should include:

- Councillors
- Traditional leaders
- Respected members of the community
- Chairpersons of the Local Water Committees

It is advisable that the Governor of the Region be consulted in the selection of the members.

#### 3. TASKS

The main function of the Central Water Committee will be to represent the community in planning and coordination of rural water supply, to stimulate the development of rural water supply schemes and to coordinate the activities of the various Local Water Committees:

- Promote the awareness in the community for the use of clean water
- Promote the establishment of rural water supply projects
- Manage, evaluate and prioritise applications for water supply projects
- Forward the selected applications to the Directorate of Rural Water Supply
- Arrange for funding for rural water supply projects with the DRWS
- Assist the Local Water Committee with the implementation of rural water supply projects
- Supervise and assist the Local Water Committees in carrying out their duties
- Create awareness among the community that they must become self-relient with regards to operation and maintenance of the projects
- Promote the awareness for hygiene and sanitation in the community
- Maintain close relationship with relevant agencies
- Advise the community on the environmental impacts of water supply

#### 4. GUIDING PRINCIPLES

The Committee shall consist of:

Chairperson

Secretary

Treasurer

General members

The Committee will establish its own constitution and terms of reference, considering:

- its responsibility towards the community it represents
- job descriptions for the various members
- rules for membership; membership will be subject to regular review
- election procedures
- meetings; frequency, reporting
- minutes of meetings to be made available to the public
- to publish decisions of major importance

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#### ANNEX 2:

### GUIDELINES FOR THE TASKS AND RESPONSIBILITIES OF THE LOCAL WATER COMMITTEE

The local water committee is a body representing the community of a particular area. The aim of the Committee is to promote and manage the water supply scheme.

#### Some suggestions are:

- 1. to assist the government or its representative with planning and implementation of the scheme
- to carry out negotiations to obtain all rights of way needed for the proposed scheme and to see to it that these rights are respected
- 3. to organise the necessary labour and or materials needed for the construction of the scheme
- 4. to assume operations and management tasks of the scheme after official handing over
- 5. to appoint and supervise one or more scheme-caretakers who will supervise the scheme operation, maintenance and repairs
- 6. to arrange for and supervise all major repairs that are too difficult for the water point caretakers
- 7. to ensure that all members of the community have access to the available water
- 8. to collect money from the Water Point Committees and to pay for the operation and maintenance costs and keep records of all income and expenditures
- 9. to enter an agreement with the Department of Water Affairs about costs and supply of services
- 10. to set the water tariffs for the end user so that operation and maintenance costs of the scheme are covered; tariff structure will be made according to national policies
- 11. to provide the scheme caretaker(s) with the funds for operation and maintenance
- to hold regular meetings and keep records of the meetings
- 13. to guide and monitor the activities of the water point committees
- 14. to invite a representative of the water point committees
- 15. to monitor and prepare standard reports about the activities of the scheme caretaker(s), the local water committee and the use of the water scheme
- 16. to submit the monitoring reports to the central water committee and the rural water extension officer
- to attend the central water committee meetings

#### ANNEX 3:

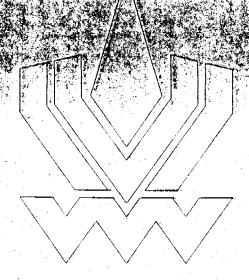
## GUIDELINES FOR THE TASKS AND RESPONSIBILITIES OF THE WATER POINT COMMITTEE

The water point committee is a body representing the community. It is elected by the community which uses the water point. The aim of the committee is to manage, operate and maintain the water point.

#### Some suggestions are:

- to assist the Local Water Committee during planning, design and construction of the project, with manpower, materials, choosing the location of water points and many other jobs that have to be done.
- 2 to keep the water point of the community in good shape and clean.
- 3 to educate the community members in the proper use of the water point.
- 4 to create awareness that the community members are responsible for the water point.
- 5 to provide rules for operation of the water point, if needed, and make sure that the rules are obeyed.
- 6 to address complaints or misuse and solve these problems in a peaceful way.
- 7 to ensure that all members of the community have access to the available water.
- 8 to collect money to pay for the operation and maintenance costs.
- 9 to keep records of all income and expenditures.
- to appoint and supervise a Caretaker who will be a special member of the Water Point Committee and who will carry out the operation and maintenance of the water point.
- 11 to support the Caretaker in his or her work.
- 12 to hold regular meetings.
- to report repairs which are too difficult for the community to carry out to the Local Water Committee and the Rural Water Extension Officer.
- 14 to report to the community on the monthly meetings of the Water Point Committee.
- 15 to collect the log books of the caretaker.
- 16 to prepare the Water Point Committee's Meeting Report, including the Treasurer's Account Book, and submit it to the Local Water Committee and the Rural Water Extension Officer.
- 17 to send a delegate to the Local Water Committee meetings.

# \*\* \*DEPARTMENT OF WATER AFFAIRS : \*\* DIRECTORATE OF RURAE WATER SUPELY!



### STRATEGY PAPER NO. ST

**IMPLEMENTATION** 

OF

RURAL WATER SUPPLY SCHEMES

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#### STRATEGY PAPER

#### PAPER NO. S7: IMPLEMENTATION OF RURAL WATER SUPPLY SCHEMES

#### 1. PREAMBLE

A number of statements in the Water and Sanitation Policy document are pertinent to the subject of implementing improvements to rural water supply schemes:

"At present the main shortfall in water supply is in the rural communal areas where only about 50% of the estimated 900 000 people had proper access to reliable sources of safe water in 1990.

Hence it is clearly justified in all equity to direct a major effort towards improvement in these areas."

"The equitable improvement of services should be a result of the combined efforts of the government and the beneficiaries, based on community involvement, participation and responsibility."

"An agreement between the community and the authorities setting out the respective responsibilities and commitments should be a prerequisite for government support."

The experience of the DRWS ( Directorate of Rural Water Supply ) is that the overwhelming majority of rural water points are substandard, both in terms of the type of facilities installed and in terms of the condition of those facilities. This is not only a technical problem, it is also an indication of a shortfall in institutional capacity. The shortfall exists in both the DRWS and within the communities themselves.

The purpose of this strategy paper is to propose a mechanism whereby rural water points can be upgraded to become appropriate technical facilities and, at the same time, build up the organisational structure necessary to ensure that the facilities can be sustained on a long term basis.

#### 2. INITIATION

The need for a new water supply scheme, or for the improvement of an existing water point, must in the first instance be identified by the local community. Without there being a felt need for improvement within the community there is little chance of enthusiastic community involvement. Identification of need may arise spontaneously from within the community or as a result of sensitisation by the RWEO (Rural Water Extension Officer).

The DRWS is well known in the communal areas and communities are not reluctant to report their difficulties and needs.

Once the community makes its need known to the DRWS the RWEO should first investigate the existing community structures; if there is no water point committee, or other organisation that can operate as a water point committee, then the RWEO should assist the community to set one up. Once a community representative body is in place it becomes possible for the RWEO to discuss the different options for water supply in detail with them. The RWEO then assists the Committee to complete an application for rural water supply. The assistance of the RWEO in filling in the application form is no guarantee that the application will succeed, but the probability of support will be greater.

A copy of the application form which is currently being field tested is shown in Annex 1.

In assisting the community to make an application the RWEO will try to ensure that potential improvements to the water point are not overlooked. In addition the community must decide what contribution it is prepared to make towards the cost or labour involved in the construction work. Applications which indicate a high degree of commitment by the community will stand a higher chance of passing successfully through the selection procedure.

The DRWS does not have sufficient resources to support every request for assistance, only the most pressing cases can be attended to. Therefore a selection process must be followed. The DRWS is not well placed to evaluate the merits of different applications and so this task is delegated to the CWC (Central Water Committee). The purpose, tasks and responsibilities of the CWC are described fully in Strategy Paper S6.

The CWCs need to be fully appraised of suitable criteria for ranking the applications. These criteria must be identified by the CWC members themselves with guidance from the DRWS.

Once the applications have been prioritised by the CWC, then the DRWS can act on the highest ranking applications.

#### 3. INVESTIGATION AND PLANNING

The RWEO will inform the water committee whether their application has won the support of the CWC and the DRWS or not. In the case of successful applications the RWEO should introduce the water committee to the concept of the Community Construction Agreement, provide them with a copy of the standard form and explain it to them. The agreement is shown in Annex 2. The RWEO will arrange a date for the construction supervisor to visit the community and meet members of the water committee.

The RWEQ remains fully involved in the implementation of the new work throughout.

Before visiting the community the construction supervisor will ensure that he or she is familiar with the application and all available information on the community and their existing water supply facilities.

The construction supervisor's first site visit will consist of two main elements: an inspection of the site and any existing facilities and a meeting with the water committee. The process described below may involve more that one community visit. It is essential that the RWEO takes part in these inspections and visits.

During the site inspection the supervisor will note all of the defects of the existing facilities, any lack of facilities below the accepted standard provision, and any specific site difficulties. The construction supervisor should identify any items which are additional to the original application that are required to bring the facilities up to the accepted standard.

At the meeting with the water committee the construction supervisor should first ensure that the members are allowed to describe what they consider to be the most important items of work to be done. Only then can the additional items identified by him or her be brought up for discussion. The construction supervisor must ensure that the reasons for including the additional items are carefully explained in order to win the support of the committee.

By the time the construction supervisor visits the site the members of the water committee will have had the opportunity to consider the Community Construction Agreement in detail. Any further questions on the agreement should be answered at this stage. The standard form of the agreement will not be appropriate to every scheme or applicable to every community without modification. This meeting is the first opportunity to negotiate the necessary amendments.

Further meetings between the construction supervisor and the Committee sould take place until both parties are confident that construction can proceed without difficulty. Once both parties are satisfied with the negotiated Community Construction Agreement, and in particular the project plan which forms an important part of it, the agreement can be signed by both parties and the construction phase of the project can commence.

#### 4. CONSTRUCTION

The first decision that the construction supervisor has to make is whether the work can be completed solely by DRWS staff in conjunction with community members or whether a private contractor must be brought in.

If the services of a private contractor are required the construction supervisor should seek the assistance of the Rural Engineering Services Division via the Regional Head. Standard forms of contract are available for various types of work including borehole drilling and larger installation works.

For minor works it is intended that use will be made of smaller local contractors working under a set of simplified contract conditions and streamlined tender procedures. The DRWS considers it highly desirable that small businesses in the rural areas are supported through this type of work. Tender Board approval has already been obtained for hiring smaller contractors in the Cuvelai Region under streamlined tender procedures.

The simplified conditions of contract for minor works are being prepared by the Rural Engineering Services Division. The aim of the conditions will be to provide a fair structure for such contracts which do not place an undue burden on the contractor whilst ensuring that the DRWS obtains an adequate quality of service. The conditions will be simple so that the obligations of each party are easily understood and so that the contracts will not be difficult to supervise.

One of the major difficulties which is foreseen with the use of private contractors is the coordination of their work with the community contribution. The DRWS will be in a difficult position for two reasons; firstly they are under an obligation to the contractor which is reliant on the performance of community members and secondly the standing of the DRWS in the community is dependent on the contractor's performance.

Where the work is to be carried out <u>without</u> the assistance of a private contractor the role of the construction supervisor consists of the following tasks:

- a) Ensure that all necessary materials are ordered
- b) Plan and oversee the work of the DRWS construction team
- Assist the community to plan and complete their contribution in close cooperation with the RWEO
- d) Quality control
- e) Caretaker Training in close cooperation with the RWEO
- f) Record keeping

In order to be able to perform these tasks adequately the construction supervisor will require training and a high level of logistical and managerial support. It will also be impossible for the construction supervisor to carry out the work property unless the RWEO is fully involved at every step.

#### 5. HANDOVER

At the conclusion of the construction work to the satisfaction of all parties the new or refurbished scheme is handed over to the water committee for "user ownership". The procedure for handover has already been tested and found to work on the Cuvelai pipeline schemes.

The first step in the handover procedure is the joint inspection of the new work. During the inspection a "repairs list" is drawn up indicating who is responsible for rectifying any defects that may be found. At the end of the joint inspection the first part of the handover/takeover form is filled in. This section of the form commits each party to rectify the defects for which they are responsible by an agreed date. The date for the final inspection and handover is also agreed at this stage. A copy of the handover/takeover form is shown in Annex 3.

Before the final inspection takes place, it is important that the wording of the Rural Water Supply Agreement is finalised. A standard form of words for the agreement is given in Strategy Paper S1.

Assuming that all of the defects have been rectified by the agreed date the scheme can be finally inspected and handed over. Part 2 of the handover/takeover form is signed by senior representatives of the DRWS and the water committee. The new work is handed over under the conditions set out in the Rural Water Supply Agreement. It is usual for this event to be marked by a celebration involving the whole community in recognition of the effort expended on the work.

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Registration No:	/Region/19_
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#### **DEPARTMENT OF WATER AFFAIRS**

#### DIRECTORATE OF RURAL WATER SUPPLY

#### **APPLICATION FOR RURAL WATER SUPPLY**

Note:	This form must be completed in BLOCK LETTERS and BLUE or BLACK INK.	. :
Section	• <b>A:</b>	
1,	Applicant:	
2.	Contact Person:3. Telephone:	
4.	Address:	<del></del> _
Section	B:	
5.	Region:	
6.	Name of Farm/ Village/ School/ Clinic/ Centre for which water is required: (Delete which is not applicable)	
7.	Please give detailed description of location:	
8.	Number of houses or homesteads to be supplied with water.	
9.	Number of people to be supplied:	
10.	Number of animals to be supplied: (a) Large stock ( cattle, horses and donkeys) :	·
. :	(b) Small stock ( goats, sheep and Pigs):	
11.	How much water is required ?:	m³/day
12.	Present water situation: (a) source(s)	
	(b) yield:	m³/day
Section	G:	
13.	Please indicate reason(s) why a new water supply is required:	
	Present water supply is inadequate/ expected to become inadequate	
:	Present water supply is of poor quality	
	Present water supply is more than 5 kilometres away from users	
* .	Other: Please specify:	

### ANNEX 1 (CONTINUED):

14.	Please h	ndicate the type of in	nstallation or service	that is required:				
	0	New borehole/ well	(Delete which is not ap	opticable)				
	0	Rehabilitation of ex	isting borehole/ well		*.			
	•	New pump on exist	ling borehole/ well					
	a	Repair of pump on	existing borehole/ well					
	0	Off-take from existing	ng pipeline					
	0	Other: Please spec	ify:	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	· · ·		·	
Section	E:	to be completed for	requests for existing b	orehole or well	only			
if there	is an existi	ng borehole/ well, pla	ease fill in the following	:			e de la companya de l	
15.	Depth of	water level:					<del></del>	metres
16.	Depth of	borehole:						metres
17.	Diamete	r of borehole casing:		· · · · · · · · · · · · · · · · · · ·		<del></del>		millimetres
18.	is there	pump installed on the	he borehola/ well?	Yes	□ No			
19.	if yes, w	nat type of pump?	C) Handpump C	Windmill	□ What i	make?	,	<del></del>
		☐ Electric pump	Diesel pump 🗓	Solar pump	<u>-</u>		···	<del></del>
Section	F;	to be completed for	requests for off-takes	only				:
<b>20</b> .	Distance	from existing pipelin	e:				·	. kilometres
Section	G:	to be completed by	Rural Water Extension	on Officer only				
21.	Please k	ndicate the priority of	the application:					
	f) Crisi	s Priority;	Water supply has brok An emergency situation			•		within days.
	🛚 High	Priority:	Water supply situation within the next stx mod	•	le and anima	als may die	uniess wate	r is supplied
	□ Med	um Priority:	Water supply is urger alternate supply is ava	•				
	□ Low	Priority:	Water supply is likely	to become inade	iquate within	the next h	welve months	<b>.</b>

		—
ANNE	EX 1 (CONTINUED):	
Section	on H: to be completed by the Rural Water Extension Officer only	
<b>22</b> .	Are funds available for the project?   ☐ Yes ☐ No	
23.	Who will fund the project? ☐ Private ☐ Government ☐ Other:	· 
24.	If government funded, please specify amount available:	. N
25.	If government funded, please indicate vote number:	
Section	n I:	
26.	Who will pay for the water?	:
27.	Who will operate the installation?	
28.	Who will make tain the installation?	
29.	Who will train people to operate and maintain the installation?	
Section		
30.	Please supply further information or comments supporting this application:	
	e.g. What contribution towards completing the work are you prepared to make?	
	What contribution towards operating and maintenance costs?	
e.		
		_

#### ANNEX 1 (CONTINUED):

31. In the space below, draw a map indicating the location of the village/ school/ clinic/ centre/ other:

32.	Office address and telephone number of Rural Water Extension Officer:			

Name of Rural Water Signature Date
Extension Officer

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#### ANNEX 2: COMMUNITY CONSTRUCTION AGREEMENT

Water Point Committee or Local Water Committee of:	Nater Cor	mmittee'
Water Point Committee or	-	
NATE OF THE OR AND THE		100

#### 1. PURPOSE OF THE AGREEMENT

between the Directorate of Rural Water Supply and the

The parties to this agreement shall cooperate with each other to complete it	he
	ural Water Supply Project

The project includes technical and organisational training as well as physical construction work. The project plan consists of the following documents, copies of which are attached to this agreement.

List of materials to be supplied by the community Schedule of Work to be done by the Community List of materials to be supplied by the DRWS Schedule of Work to be done by the DRWS Detailed design drawings Project time schedule

The plans for the project have been produced jointly by the water committee and the DRWS.

#### 2. RESPONSIBILITIES OF THE WATER COMMITTEE

The water committee agrees to:

- Cooperate fully with the DRWS to complete the project in accordance with the plan.
- Provide all unskilled labour required to complete the project.
- Ensure that the community labourers work to the direction of the DRWS construction supervisor and to ensure that they respect the supervisor's experience, judgement and authority.
- 4. Ensure that the labour is available at the times agreed with the construction supervisor.
- 5. Provide materials as listed on the attached sheet " Materials to be Supplied by the community" to the site at the correct time.
- 6. Arrange with the construction supervisor for offloading at site of the materials provided by the DRWS.
- 7. Improve any part of the community's contribution which the construction supervisor says is not good enough.
- 8. Ensure that the caretakers participate fully in the construction of the project and are available for the necessary training by DRWS.

#### ANNEX 2 (CONTINUED):

#### 2. RESPONSIBILITIES OF THE WATER COMMITTEE (CONTINUED)

- 9. Take part in the final inspection of the project prior to handover.
- Enter into a Rural Water Supply Agreement with the DRWS for operating and managing the scheme after handover.

#### 3. RESPONSIBILITIES OF THE DIRECTORATE OF RURAL WATER SUPPLY

The Directorate of Rural Water Supply agrees to:

- 1. Cooperate fully with the water committee to complete the project in accordance with the project plan.
- 2. Provide an experienced construction supervisor to oversee unskilled labour and to organise satisfactory completion of the project.
- 3. Make available skilled labour and special tools as needed to complete the project,
- Provide training to the community labourers if this is needed for satisfactory completion of the project.
- 5. Provide materials as listed on the attached sheet " Materials to be provided by the DRWS" to the site at the correct time.
- 6. Provide skills training to the water committee members if needed.
- 7. Improve any part of the DRWS contribution which the construction supervisor says is not good enough.
- 8. Provide training to the caretakers appointed by the water committee.
- 9. Take part in the final inspection of the scheme.
- Enter into a Rural Water Supply Agreement with the water committee upon satisfactory completion of the project.

SIGNED:			
DRWS:		Water Committee:	_
			_
Date:			
	•		

STRAT7.DOC 15/8/94.

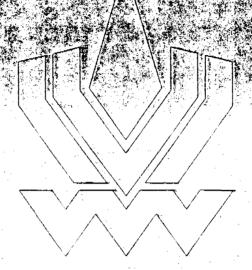
ANNEX 3:

#### HAND OVER/TAKE OVER FORM

PROCEDURE FOR THE HAND OVER/TAKE OVER OF A PIPED RURAL WATER SUPPLY SCHEME FROM THE DIRECTORATE OF RURAL WATER SUPPLY TO THE LOCAL WATER COMMITTEE NAME OF WATER SUPPLY SCHEME: LOCATION OF WATER SUPPLY SCHEME: PART 1: JOINT INSPECTION OF WATER SUPPLY SCHEME PERSONS PRESENT AT INSPECTION: DRWS: ..... LWC: DATE: ..... The joint inspection of the water supply scheme has resulted in a list of necessary repairs, as shown in the attached REPAIRS LIST which also states who is responsible for each repair. Date agreed for completion of repairs: Date agreed for the FINAL JOINT INSPECTION: SIGNED: LWC: DRWS: ..... DATE: ..... PART 2: FINAL JOINT INSPECTION OF RURAL WATER SUPPLY SCHEME The final joint inspection of the scheme has been carried out and both parties agree that the scheme is in good order and operational condition. The scheme is hereby officially handed over to the Local Water Committee under conditions set out in the AGREEMENT between DRWS and the LWC. SIGNED: LWC: DRWS: ..... DATE: .....

STRAT7.DOC 15/8/94.

# DEPARTMENT OF WATER AFFARS



# STRATEGY PAPER NO. S8

**OPERATION AND MAINTENANCE** 

OF

RURAL WATER SUPPLY EQUIPMENT

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#### STRATEGY PAPER

# PAPER NO. S8 : OPERATION AND MAINTENANCE OF RURAL WATER SUPPLY EQUIPMENT

#### 1. PREAMBLE

The overwhelming majority of rural water points in Namibia are in a very poor state of repair. The Water Supply and Sanitation Sector Policy document estimated that only 50% of the people living in communal areas had proper access to a reliable source of safe water in 1990. It will never be possible to improve this figure unless a way is found to maintain existing water points in good working order.

The focus of investment in recent years has been on the creation of new water points. The reason for this is that it is very easy to quantify the short term results of such expenditure. Unfortunately, little attention has been given to ensuring that the new equipment has a chance of surviving for more than a year or two. Even less effort has been devoted to improving the care of existing equipment.

As a result of the misdirection of resources described above, the demands on the maintenance teams in the rural areas have increased whilst their ability to deal with those demands has been neglected.

This overloading of the maintenance teams is in direct contrast to the stated aims of the Water and Sanitation Policy document:

"Government support services should be seen as a medium for eventual self sufficiency and, as a matter of principle, not be extended free of charge, but be priced according to a pricing policy to be agreed upon. Government should thus rather pursue the role of a facilitator rather than a provider."

The aim of this Strategy Paper is to describe the means by which the present unworkable system of rural water point maintenance can be improved and modified towards the principle put forward by the WASP document.

#### 2. CURRENT ARRANGEMENTS FOR OPERATION AND MAINTENANCE

At present there is informal recognition by most communities that it is their responsibility to operate the rural water point; no independent rural community expects a government official to start and stop the diesel engine every day. In many communities there is one individual who takes a greater interest in the water point than others and in a large proportion of these his services are recognised and payed for by other community members. The concept of the water point caretaker is well established in Namibia.

The caretaker will usually have had a small amount of informal training. Unfortunately this training is likely to have been incomplete and in some cases incorrect. For example, a professional trainer was until recently telling caretakers not to fill diesel engine cooling tanks above the top connection, this is not correct advice. Most caretakers are keen to become better informed about the care of their equipment; poorly looked after equipment is almost always a result of ignorance rather than abuse.

With this level of training the expectation of the caretakers and the community is that the DRWS (Directorate of Rural Water Supply) is entirely responsible for repairing the equipment when it inevitably breaks down. This expectation is shared by DRWS staff in the regions. Until alternative approaches to

ownership, caretaker training and routine maintenance are established and operational the DRWS will remain in this position. It is therefore important that in the interim period the existing system should be made to work as efficiently as it can.

An important factor affecting the efficiency of the current system is the quality of work done by the DRWS themselves. Where repairs are not carried out properly they are subject to repeated failure.

For the five northern regions, an emergency training programme has been started to ensure that all of the maintenance teams acquire the skills necessary to carry out their current duties. It is anticipated that a similar programme will be arranged for the five southern regions in the future.

It is not possible for this Strategy Paper to give specific recommendations on improving the operational efficiency of the maintenance teams in each region. For instance Caprivi Region has found that the maintenance teams operate most effectively from the central office, Omaheke Region finds that it is better for the teams to be based at "sub-regional" centres. Some of the approaches that regional heads have found to be effective in their region are listed below:

	Keep a log of all complaints received.
	Attend to a group of complaints from one area and then a group of complaints in the next area.
	Each maintenance team should cover a specific area within the region.
0	Maintenance teams should be responsible for carrying out workshop repairs on the engines from their own area.
<b>a</b>	Maintenance teams should carry a comprehensive set of spare parts with them.

# Once a community has established a water committee, responsibility for operating the water point in accordance with the wishes of the community will rest with the water committee. The day to day task of operating the water point is delegated by the committee to one or more caretakers. One of the things that the water committee undertakes to do when it enters into a rural water supply agreement (see Strategy

RESPONSIBILITY FOR OPERATION

Paper S1) is to appoint and support the caretaker(s). The committee is given guidance on suitable criteria for selecting caretakers.

Also as part of the rural water supply agreement, the DRWS undertakes to provide adequate training for the caretaker(s). Part of the training may be provided by the RWEO (Rural Water Extension Officer) but it is likely that additional training will be required for the more technically sophisticated types of water point, for instance diesel engines or windmills. Training requirements are discussed in more detail in section 5 below.

As part of his or her operational responsibilities, the caretaker will perform routine maintenance tasks and keep records of these as they are performed. The caretaker also has a role to play in educating the community in the use of the water point; avoid wastage, close taps after use, do not close taps too tightly and so on. The caretaker should refer any difficulties which he or she has not been trained to deal with to the water committee as well as the normal regular reports to the water committee.

As the payment strategy comes into operation the community will become responsible for the local operation and maintenance costs. This will be a direct incentive for the community to operate the water point in the most efficient manner.

3.

#### 4. RESPONSIBILITY FOR MAINTENANCE

At present, most water point caretakers do not acknowledge any responsibility for routine maintenance tasks. Running repairs are carried out through necessity with a certain amount of resentment as repairs are felt to be the government's responsibility; after all, the equipment belongs to the government. One of the consequences of this lack of a sense of ownership is that makeshift repairs are carried out which even a poorly trained caretaker knows are substandard. The proposals for "user ownership" presented in Strategy Paper S1 are intended to encourage communities to develop a sense of pride in their water point.

There is a choice of two routes which the DRWS could follow towards the eventual aim of self sufficiency. The first option is for the community to be responsible for routine maintenance and minor repairs only. If a failure occurs which is too difficult for the community to repair themselves, or too expensive, then the DRWS comes to the rescue and rectifies the situation.

The second option is for the DRWS to carry out a routine inspection (and possibly service) at regular intervals. Major repairs are deemed to be the responsibility of the community. Assistance may be sought from the DRWS only if failed equipment is over a certain age or factors outside the community's control contributed to premature failure.

Both of these approaches have their advantages and disadvantages. The first option is perhaps the most straightforward and easily understood. It makes sense that the large effort involved in mobilising a maintenance team to a remote community should only be undertaken when a sufficiently serious breakdown occurs. The obvious disadvantage of this scheme is that some communities may not feel an incentive to carry out routine maintenance or correct minor faults. It may be preferable to them to walt until a major fault develops which the DRWS will be obliged to mend for free.

The main disadvantage with the second option is that it may place a high risk on the poorest and least well organised communities. Another disadvantage is that the DRWS may gradually lose control of the quality of repair work carried out. It could be argued that both of these drawbacks are inevitable features of promoting self sufficiency.

The advantage of the second option lies in the regular inspections carried out by the DRWS. Regular inspection means that some faults can be identified before they develop into a major problem. If the caretaker is not doing the job properly he or she can be put back on the right track before something goes seriously wrong. In other words the approach is preventative and aimed at avoiding difficulties.

The points listed below are the DRWS maintenance strategy. They take the most desirable features from both approaches and incorporate steps to minimise the disadvantages.

- The water committee is responsible for care of the water point equipment. The committee will delegate the following tasks to the caretaker(s):
  - Keeping the water point area and equipment clean.
  - Routine checks on the equipment and corrective action.
  - Routine maintenance of the equipment including replacement parts.
  - Minor repairs which the caretaker has been trained to do.
  - Record keeping.

The DRWS will provide training to the caretaker(s) appointed by the water committee in the following tasks: - Operation of the water point equipment. - Routine checks on the equipment and corrective action. Routine maintenance of the equipment including replacement of parts. Minor repairs. Record keeping. The DRWS will carry out a routine inspection and service of the equipment at regular intervals. The frequency of the inspection and service will depend firstly on the type of equipment at the water point and secondly on the availability of maintenance resources. The following duties are to be carried out by the water committee at their own expense using an expert contractor. Any repairs which the caretaker has not been trained to do. Replacement as required of any parts or equipment that are less than five years old. Replacement as required of any parts or equipment that have not been cared for properly. The DRWS will advise the water committee on the suitability of local contractors for carrying out work on the water point. The water committee is responsible for protecting the equipment from vandalism and theft. The DRWS will replace or repair water point equipment which was supplied by the Government if it has failed due to factors outside the control of the community. In particular: DRWS will repair damage to equipment caused by wild animals or extreme weather DRWS will repair or replace equipment which was defective when first installed. DRWS will replace as required any parts or equipment that are more than five years old and which have been cared for properly. but DRWS will not normally repair or replace equipment damaged by vandals whether from within or outside the user community. Where the DRWS is responsible for carrying out major refurbishment work, whether it be the relining of a reservoir or overhaul of a diesel engine, this will be done as far as possible through the use of small local contractors. The DRWS will negotiate with the community to agree suitable standby arrangements whilst repairs are being carried out.

#### 5. IMPLEMENTATION

The transition from the current arrangements to the future maintenance strategy will be a lengthy process. The first step in the process is to train the DRWS maintenance staff to be able to perform their existing functions adequately. Simultaneously the Regional Offices must streamline the method of working of their maintenance teams to be as effective as possible. Both of these activities are in hand by the DRWS. Efforts are also being made to record the details of all rural water points and the equipment at each one.

The next step will be to train the water point caretakers. How this will be achieved in each region depends on the preferred approach of the regional head. The ideal will be to establish a mobile caretaker trainer for each region. Some support is available in terms of suitable personnel and vehicles. There are currently plans to establish five mobile caretaker/community trainers.

For a water point with a simple installation it will be possible for the RWEO to conduct the caretaker training without external assistance in one or two sessions. For water points which are more sophisticated the caretaker training will need to be carried out with the assistance of the technical trainer over a longer period.

Many people within the DRWS believe that the caretakers will not be able to keep proper records due to illiteracy or innumeracy. This is not an insurmountable difficulty, especially if the community is asked to find the solution. Potential solutions include the appointment of assistant caretakers, reallocation of the responsibility for record keeping or, best of all, that the caretaker learns to write and do simple arithmetic.

In order that the caretakers receive adequate backup from their communities it is important that the water committees function correctly. This also requires an element of training and guidance from the RWEO to the water committee members, particularly the treasurer. If the water committees do not function correctly then caretakers will not carry out their tasks with diligence.

With competent operation and proper routine maintenance it is to be expected that the frequency of major failures will reduce in the long term. (There may be an initial period when reporting of failures actually increases due to greater awareness of the caretaker). Once the reporting of failures begins to reduce, it will be possible for the maintenance teams to reduce the backlog of work. With shorter waiting lists the response time will get less and so faults will be rectified more rapidly. The two indicators of reliability; mean time between failures and mean time to repair, can thus be improved considerably by the simple step of ensuring that water point caretakers are properly appointed, trained and supported.

The temptation for management at this time will be to seek short term cost savings and to reduce the activity of the maintenance teams. If this route is taken it is likely that the service level to rural consumers will rapidly revert to the current position. Resource input to the maintenance effort should be held at a high level until the full maintenance strategy is in place. Only once stability has been achieved will it be possible to start to relax the DRWS input.

The next step in the process will be the water committee's realisation that the burden of maintaining the water point is not great now that it is properly operated and maintained. It is at this point that a rural water supply agreement should be negotiated, if it does not exist already. Once a rural water supply agreement is in place the water point becomes partially self sufficient and the community takes a greater degree of responsibility for its water supply.

The Water Supply and Sanitation Sector Policy states that " the overall sustainability of the sector will depend on its ability to become self sufficient by at least covering running and maintenance costs". As long as the Government has a stake in the equipment at a particular rural water point, it will wish to see that equipment is properly looked after and therefore the routine inspection and service should continue. The logical next step to total self sufficiency is for the community to purchase and take complete charge of their very own water point equipment. Although it is true to say that some farmers in the rural areas have already gone this far, and more are following, this is not the case for the majority of people. The final step must remain as the community's decision. The intermediate steps described in this and other Strategy Papers will ensure that the community is fully prepared to take that step.